CULTURAL RESOURCES SURVEY OF THE CROSS-ORANGEBURG 230kV TRANSMISSION LINE, ORANGEBURG AND BERKELEY COUNTIES, SOUTH CAROLINA

CHICORA RESEARCH CONTRIBUTION 439

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ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 40 mile (32 miles of surveyable land) corridor that runs east-west through Orangeburg and Berkeley Counties, South Carolina. The work was conducted to assist S&ME and their client, Santee Cooper, in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Santee Cooper for the construction of a transmission line. This line will begin at an existing substation to the west and terminate at an existing transmission line to the east. The topography is undulating with drops in elevation at the various drainages, rivers, and swamps throughout the corridor.

The proposed route will require the clearing of the corridor, followed by construction of the proposed transmission line. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the proposed transmission line was assumed.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified eight previously recorded sites in the APE (38OR2, 38OR22, 38OR95-97, 38OR260-261, and 38OR274). Site 38OR2 is an eighteenth to nineteenth century historic fort or trading post site. The site was recorded in 1972, but no eligibility determination was made. The site was destroyed in 1977 for the construction of the a sewer plant. Site 38OR22 is a prehistoric site that was recorded in 1972 and consists of one flake. Again, no recommendations were given for the eligibility of the site. Sites 38OR95-97 are nineteenth to twentieth century sites that were recommended not eligible for the National Register of Historic Places. Sites 38OR 260-261 are Middle Woodland sites that were recommended not eligible for the National Register. Site 38OR274 is a nineteenth to twentieth century historic scatter that was recommended not eligible for the National Register.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. Two sites, 531-0111 and 531-0173, were recorded. No information on site 531-0111 was given other than it was determined not eligible for the National Register. Site 531-0173 is a ca. 1941 bridge over Providence Swamp that was recommended not eligible for the National Register of Historic Places. No comprehensive architectural survey has been performed for Orangeburg County. A county-wide survey was performed for Berkeley County (Schneider 1989), however less than 2.0 miles of the corridor extends into Berkeley County and no structures were identified.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the center line of the 100-foot right-of-way, which was marked by stakes and flags. All shovel test fill was screened through ¼-inch mesh with a total of 1,160 shovel tests excavated along the corridor.

As a result of these investigations six sites, 38OR280-285**,** were identified. Site 38OR280 is a Middle Woodland scatter; site 38OR281 is an early to mid-twentieth century domestic scatter; site 38OR282 is a late nineteenth to early twentieth century domestic site; site 38OR283 is a Middle Woodland to Mississippian and eighteenth to early nineteenth century scatter; site 38OR284 is a late nineteenth to early twentieth century domestic scatter; and 38OR285 is a late nineteenth to early twentieth century domestic site. All sites

are recommended not eligible for the National Register of Historic Places for their lack of integrity and inability to address significant research questions.

A survey of public roads within a 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. Six sites, 0212-0216, were identified. Site 0212 is a ca. 1819 cemetery that is potentially eligible for the National Register; site 0213 is a ca. 1900 house that is recommended not eligible; site 0214 is the Rock Hill Church Cemetery that is recommended eligible for the National Register; site 0215 is a ca. 1800s house that is recommended eligible for the National Register; and 0216, the ca. 1853 Joiner Cemetery, is recommended not eligible for the National Register.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Eric McClanahan of S&ME. The work was conducted to assist Santee Cooper comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of an approximately 40 mile corridor (32 miles of surveyable land) to be used for a 230kV transmission line in Orangeburg and Berkeley Counties (Figure 1). The project runs approximately east-west between an existing substation and transmission line (see Figure 2 for an overview of the transmission line and Figure 3 for the 7.5 minute topographic map of the transmission line).

The proposed corridor, as previously mentioned, is intended for use as a transmission line. Landscape alteration, primarily clearing and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in the survey area.

Construction and maintenance of the transmission line may also have an impact on historic resources in the project area. The project will not directly affect any historic structures (since none are located on the survey corridor), but the completed facility may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) about 0.5 mile radius around the proposed survey corridor.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Orangeburg and Berkeley counties.

We were requested by Mr. Eric McClanahan of S&ME to provide a proposal for a cultural resources survey for the transmission line on November 11, 2005. A proposal was provided on November 14. The proposal was accepted on December 21 with investigations starting shortly thereafter.

These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. As a result of that work, eight archaeological sites, 38OR2, 38OR22, 38OR95-97, 38OR260-261, and 38OR274, were found within a 0.5 mile area of potential effect (APE) (see Figure 3). Site 38OR2 is an eighteenth to nineteenth century historic fort or trading post site. The site was recorded in 1972, but no eligibility determination was made. The site was destroyed in 1977 for the construction of the existing sewer plant. Site 38OR22 is a prehistoric site consisting of one flake that was recorded in 1972. Again, no recommendations were given for the eligibility of the site. Sites 38OR95-97 are nineteenth to twentieth century sites that were recommended not eligible for the National Register of Historic Places. Sites 38OR 260-261 are Middle Woodland sites that were recommended not eligible for the National Register. Site 38OR274 is a nineteenth to twentieth century historic scatter that was recommended not eligible for the National Register.

The South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. Two such sites, 531-0111 and 531-0173, were found (see Figure 3). No information on site 531-0111 was given other than it was determined not eligible for the National Register. Site 531-0173 is a ca. 1941 bridge over Providence Swamp that was recommended not

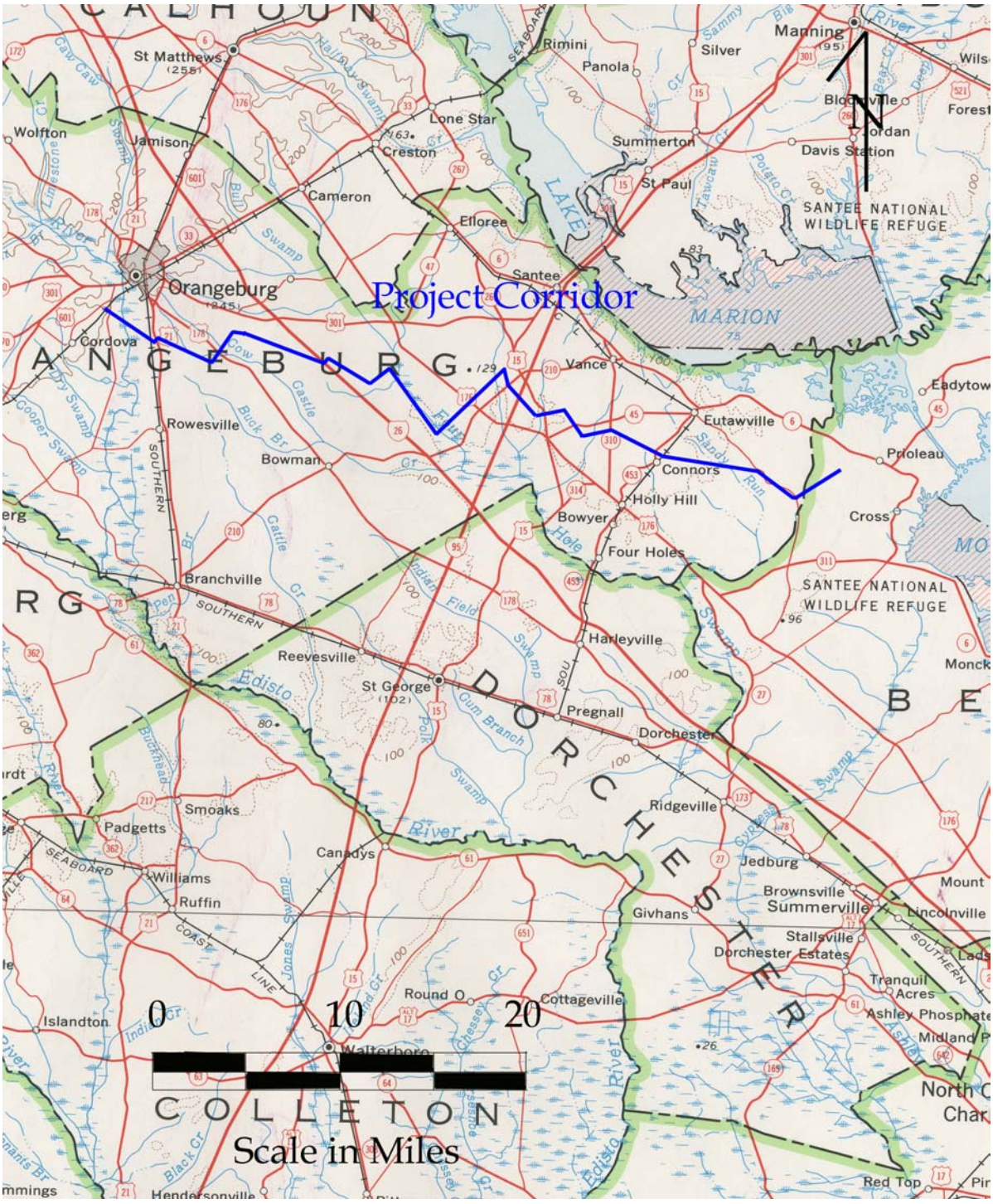


Figure 1. Project corridor in Orangeburg and Berkeley counties (basemap is USGS South Carolina 1:500,000).

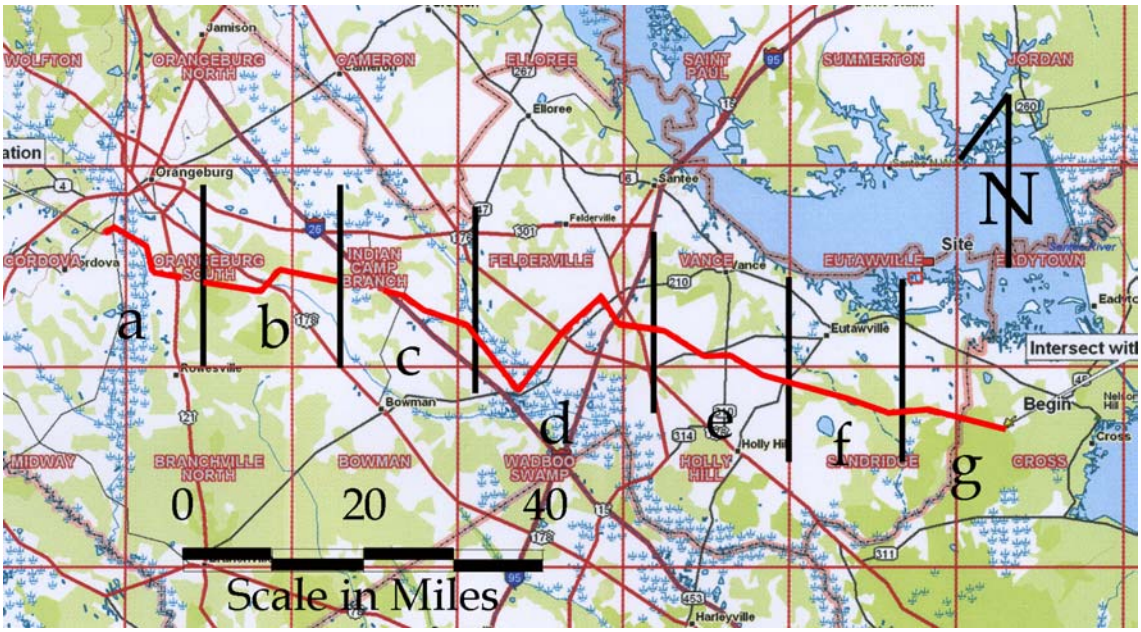


Figure 2. Overview of the transmission line showing the divisions of the route for Figure 3.

eligible for the National Register of Historic Places. No comprehensive architectural survey has been performed for Orangeburg County. A county-wide survey was performed for Berkeley County (Schneider 1989), however less than 2.0 miles of the corridor extends into Berkeley County and no structures were identified.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from February 1-15, 2006 by Ms. Julie Poppell and Ms. Nicole Southerland under the direction of Dr. Michael Trinkley and revealed six archaeological sites 38OR280-285. Site 38OR280 is a Middle Woodland scatter; site 38OR281 is an early to mid-twentieth century domestic scatter; site 38OR282 is a late nineteenth to early twentieth century domestic site; site 38OR283 is a Middle Woodland to Mississippian and eighteenth century scatter; site 38OR284 is a late nineteenth to early twentieth century domestic scatter; and 38OR285 is a late nineteenth to early twentieth century domestic site. All sites are recommended not eligible for the National Register of Historic Places for lack of integrity and inability to address significant research questions.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and were potentially eligible for the National Register of Historic Places revealed six such sites (0212-0216). These include site 0212, which is a ca. 1819 cemetery that is potentially eligible for the National Register; site 0213 is a ca. 1900 house that is recommended not eligible; site 0214 is the Rock Hill Church Cemetery that is recommended eligible for the National Register; site 0215 is a ca. 1800s house that is recommended eligible for the National Register; and 0216, the ca. 1853 Joiner Cemetery, is recommended not eligible for the National Register.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina from February 16-24, 2006. The only photographic materials associated with this project are color prints, which are not archival. Chicora Foundation temporarily retains the negatives and prints for these photographs.

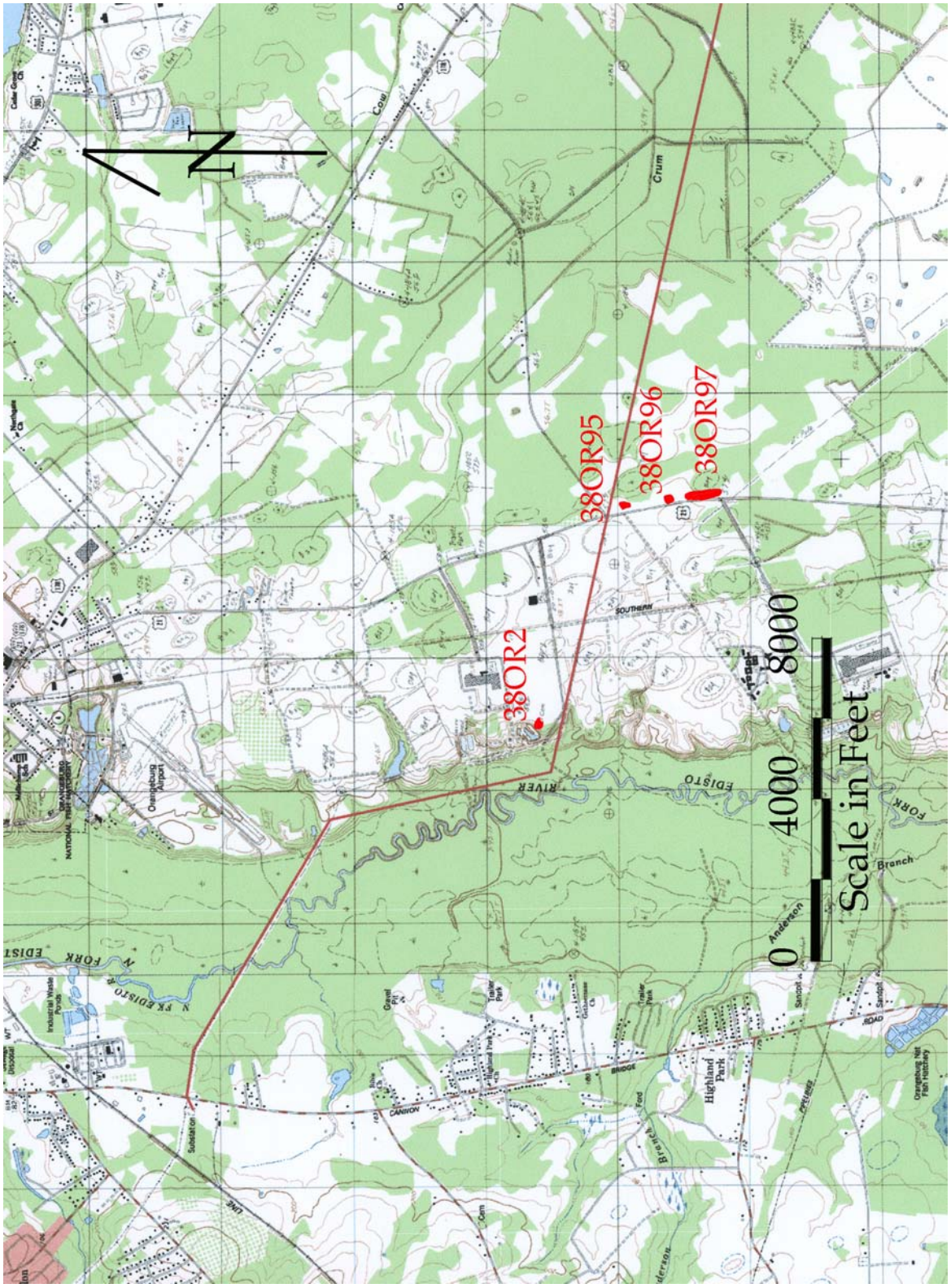


Figure 3a. Portion of the transmission corridor and previously identified sites (basemap is USGS Cordova and Orangeburg South 7.5').

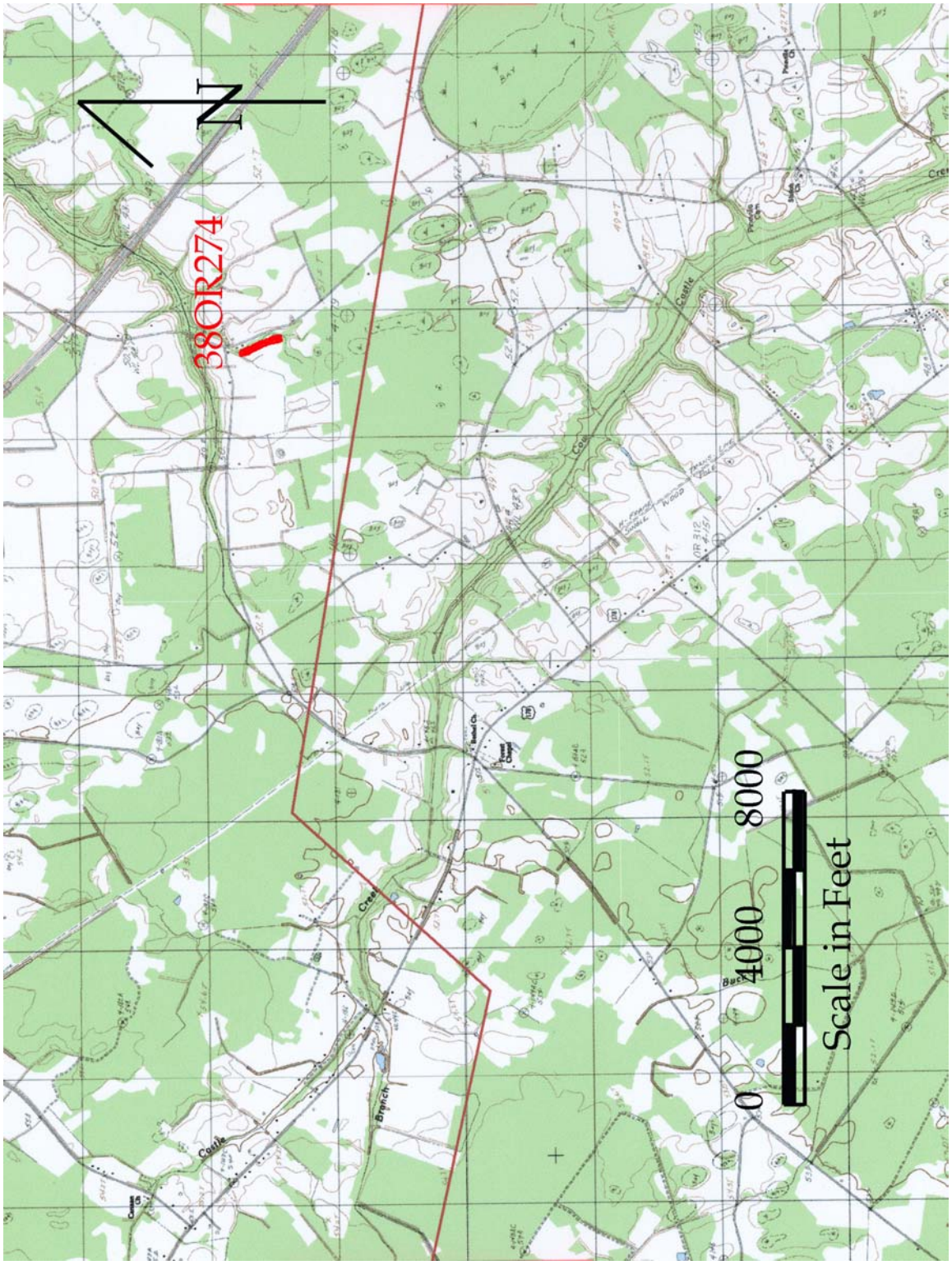


Figure 3b. Portion of the transmission corridor and previously identified sites (basemap is USGS Orangeburg South and Indian Camp Branch 7.5')

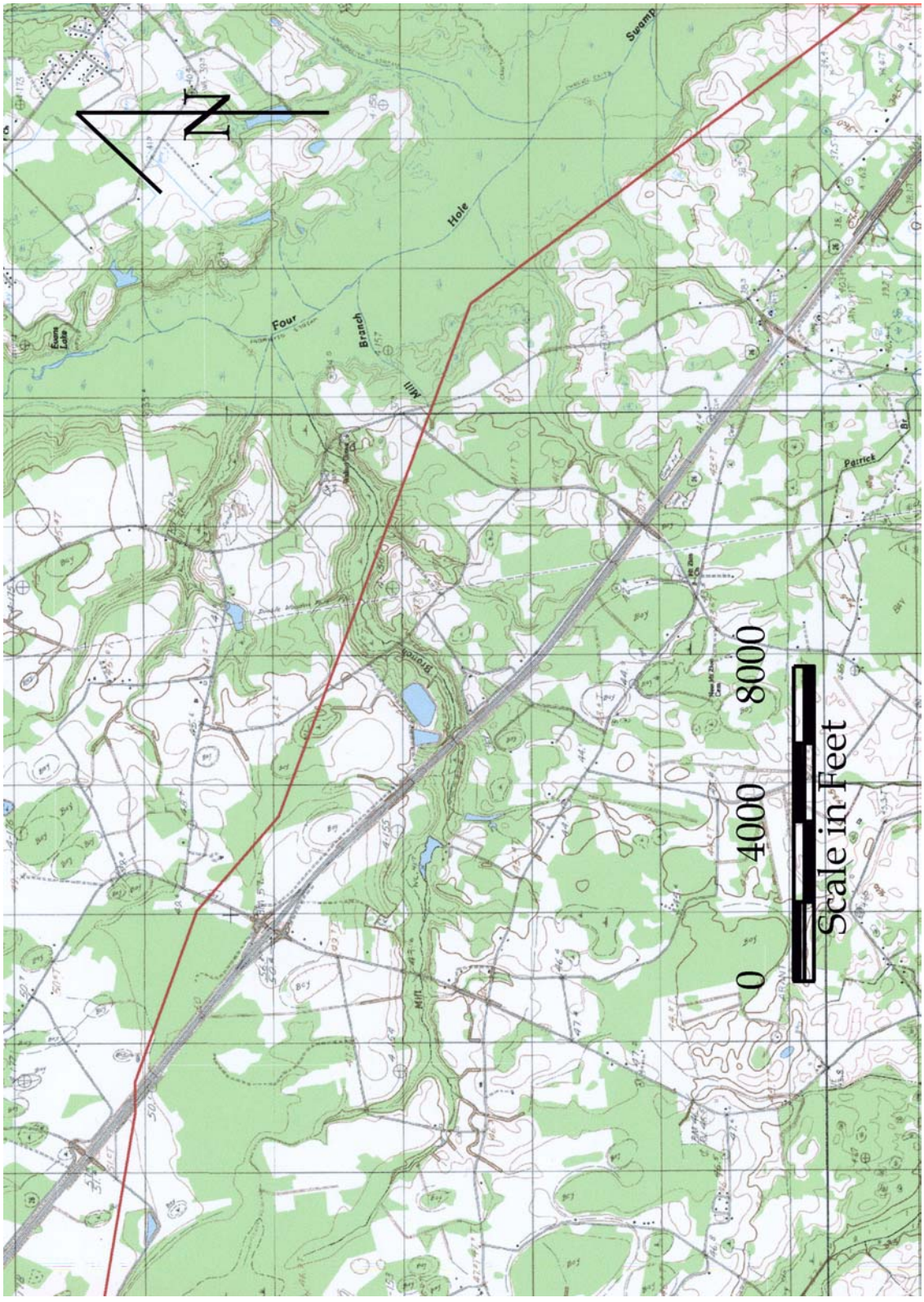


Figure 3c. Portion of the transmission corridor and previously identified sites (basemap is USGS Indian Camp Branch, and Felderville 7.5').

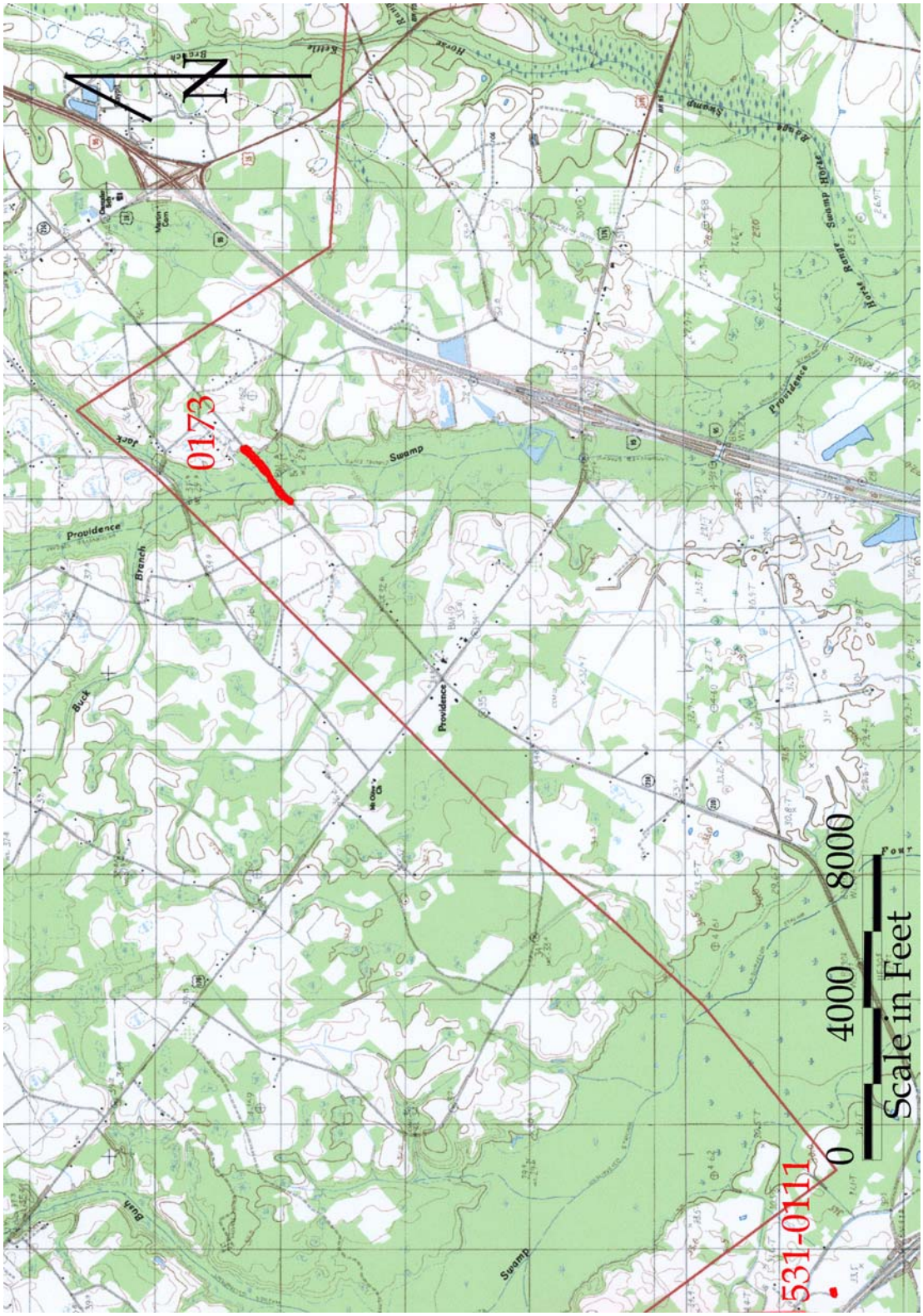


Figure 3d. Portion of the transmission corridor and previously identified sites (basemap is USGS Wadboo Swamp and Felderville 7.5').

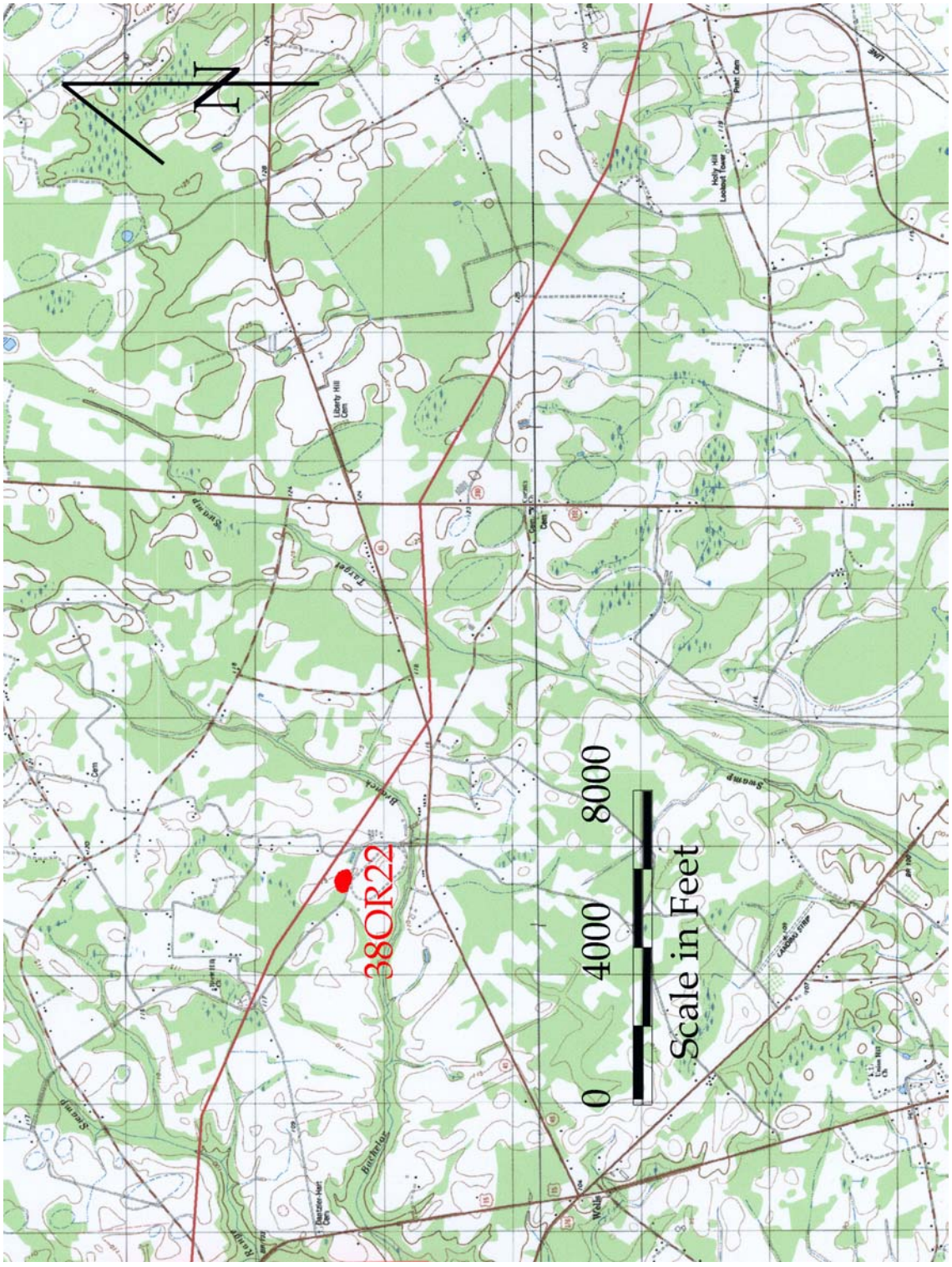


Figure 3e. Portion of the transmission corridor and previously identified sites (basemap is USGS Vance and Holly Hill 7.5')

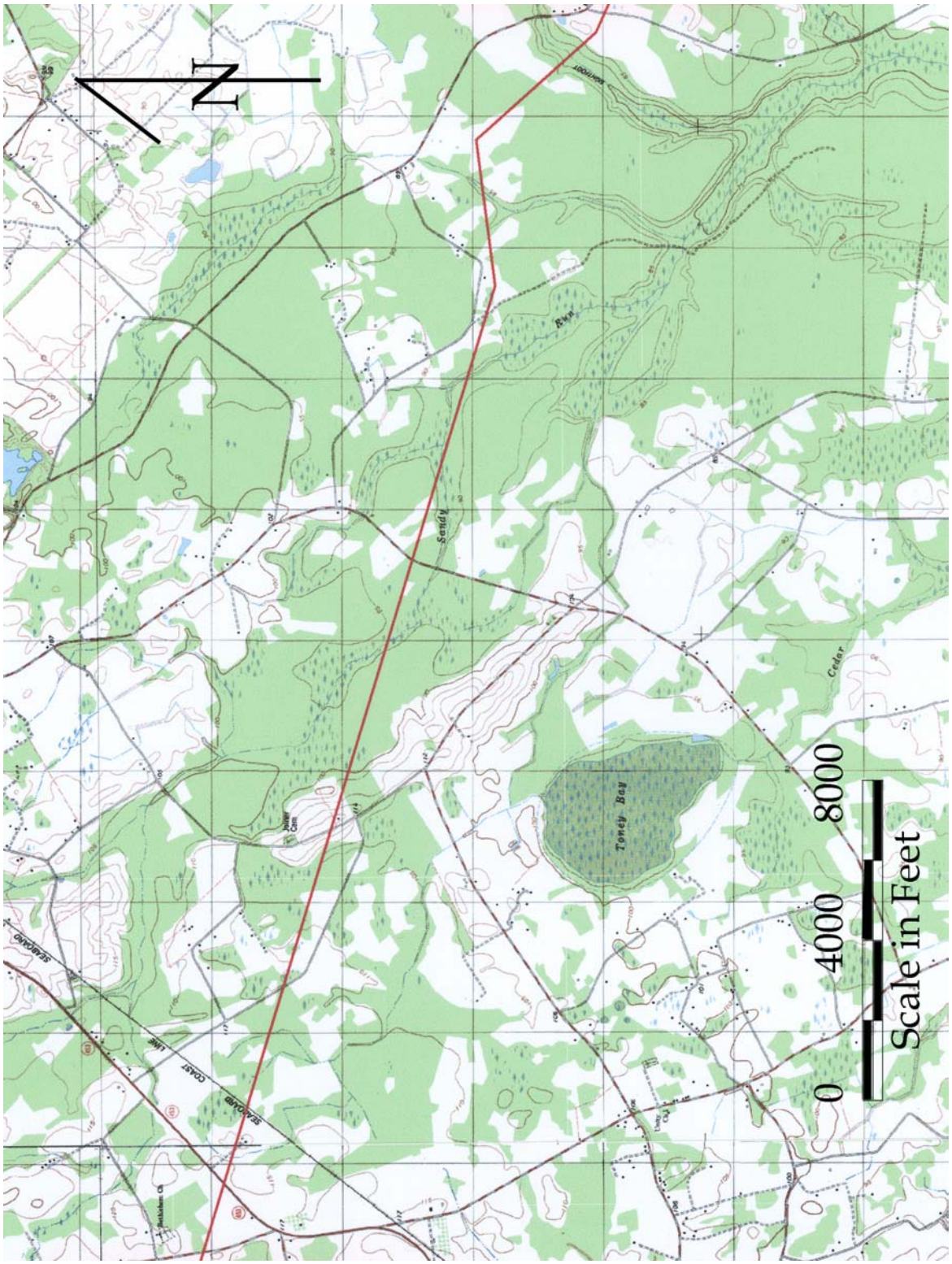


Figure 3f. Portion of the transmission corridor and previously identified sites (basemap is USGS Sandridge 7.5').

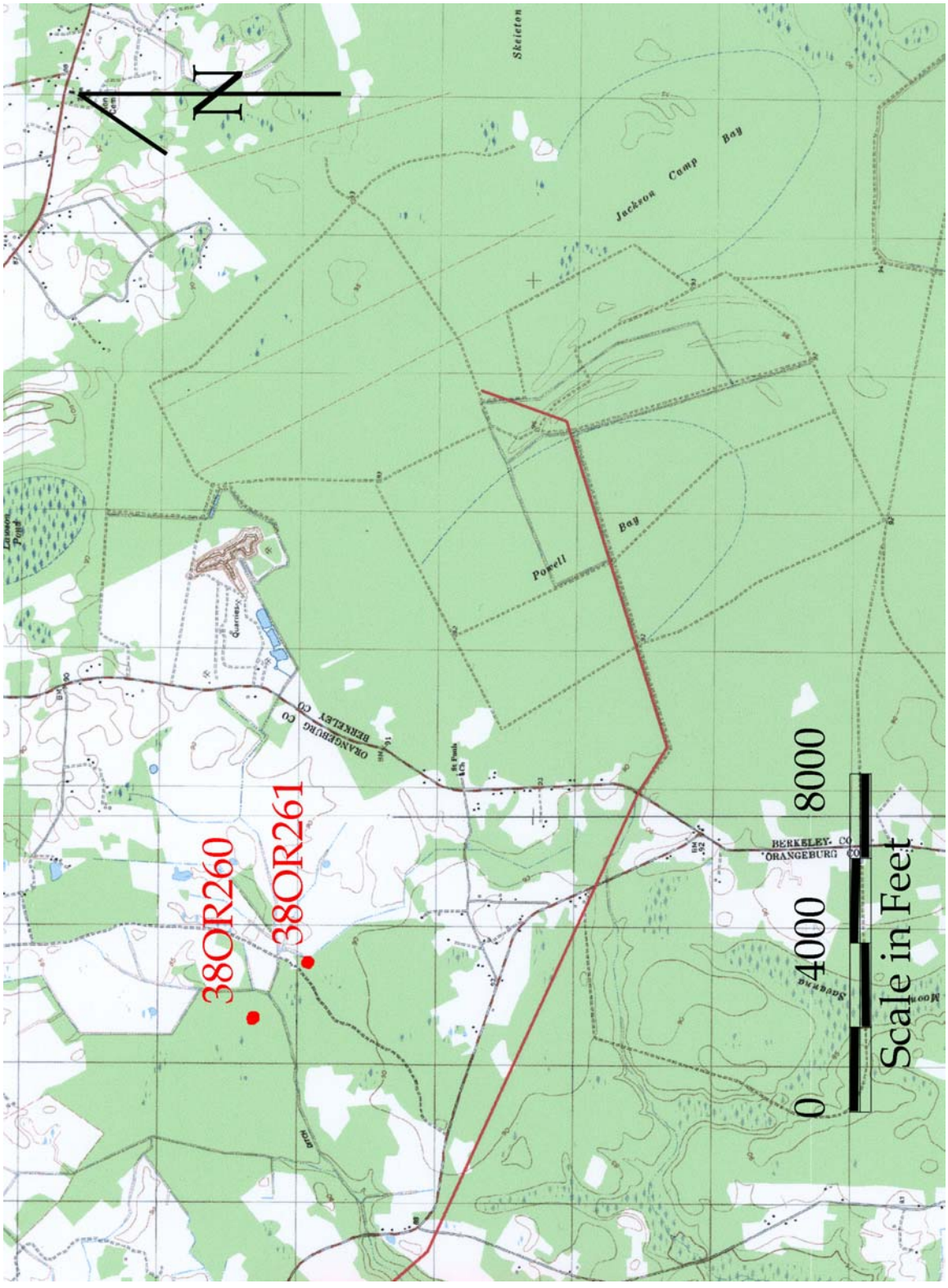


Figure 3g. Portion of the transmission corridor and previously identified sites (basemap is USGS Sandridge and Cross 7.5').

NATURAL ENVIRONMENT

Physiography and Geology

The survey corridor, running east-west through Orangeburg County, is situated in the Middle Coastal Plain, south of the Fall Line. Elevations in the Middle Coastal Plain range from 220 to 350 feet above mean sea level (AMSL), with the topography being gently rolling. As Kovacik and Winberry (1987:20) observe, it can be very difficult to distinguish the Middle Coastal Plain from that of the Sand Hills to the north or even the lower Piedmont. You find the flatter, and almost featureless, Coastal Plain topography further to the south and southeast, south of the Citronelle Escarpment (Orangeburg Scarp).

The Carolina Sand Hills to the north are an area of discontinuous hilly topography characterized by rounded hills with gentle slopes, moderate relief, and sandy soils. Although technically part of the Coastal Plain geology, the Sand Hills are distinct geographically. Much of the sand was blown into dunes during the Miocene, although weathered clays and very old river deposits are also present. In many cases these sandy deposits lie directly on the crystalline rocks of the Piedmont (Kovacik and Winberry 1987; Murphy 1995).

Orangeburg is situated in the south-central part of South Carolina. It is bounded on the north by Calhoun and Clarendon counties. To the east is Berkeley County; while to the south is Dorchester. Bamberg and Barnwell counties are situated to the southwest and separated from Orangeburg by the South Fork of the Edisto River. Aiken and Lexington counties are on the northwest boundary. The county is still considered a rural area and about half of its 707,000 acres are still cropland, with much of the remainder being woodlands.

Western Orangeburg County is drained primarily by the North and South Forks of the Edisto River, which joint together in the lower reaches of the county, about 3 miles west of Branchville. Eastern Orangeburg is drained by Four Hole Swamp and the Santee River. The latter was dammed in the 1930s to create Lake Marion. The 40 mile transmission corridor runs through both the North Fork Edisto River and Four Hole Swamp.

Figure 4. View of wetland area on the project corridor.

Figure 5. View of the Edisto River toward the western end of the corridor.

Mills comments on the numerous creeks and rivers of the Orangeburg District. He notes that many were navigable (Mills 1972 [1826]: 664-665) and the highest quality lands are situated along the Edisto. Since the area was subject to flooding, however, relatively little of the land was in active cultivation. He remarks that, "owing to their being so narrow, they would require expensive embankments, which would probably not be repaid in the value of the land thus reclaimed" (Mills 1972 [1826]:659).

Mills also comments that "Orangeburg lies within the alluvial region entirely; the upper edge just dipping into the primitive or granite region" (Mills 1972 [1826]:657). Today we recognize that this "upper region" lies in the northwestern corner of the county, which includes only the Upper Coastal Plain and a small portion of the Sand Hills – west of where this project is situated. We also recognize the complex geology of the Upper Coastal Plain where there are bedded sands overlaying kaolinitic clays and clayey, quartzose sands (Murphy 1995:93).

In this stone poor section of the state the nearest source of lithic materials for Native Americans would be the metamorphic and volcanic rocks of the Carolina Slate Belt which outcrop to the north of the survey area in Anson County, North Carolina and west along the fall line in southeastern Lancaster, northern Chesterfield, and Kershaw counties in South Carolina. Far closer are occasional deposits or outcrops of cherts and orthoquartzites (see Anderson et al 1979:11-12 for additional information).

Soils

Mills commented that the Orangeburg district included a variety of soils. Most were described as having "a light, sandy nature, thin soil, but bottomed on clay" (Mills 1972 [1826]:658). This clay bottom helps minimize the droughty nature of the sandy soils, many of which are characterized as excessively well drained. Along the Congaree and Santee rivers he observed a very different soil, described as "a stiff, red clay" found on rolling hills -- a description of a small area of the piedmont which is today part of Calhoun County to the north (but which was originally incorporated in Orangeburg District).

Today we recognize that the survey corridor consists of five distinct soil associations. The western portion of the corridor is situated in the Troup-Fuquay-Alpin association, which consists of well drained and excessively drained sandy soils with a loamy or sandy subsoil. The corridor then crosses the North Fork Edisto River, which is the Lumbee-Johnston Association that is a major flood plain. These soils are poorly and very poorly drained sandy and loamy soils with a loamy subsoil.

The corridor then passes through a section

Table 1.
Soils Found Along the Corridor

Soils on Corridor	Notes	% of Corridor	Group %
Fluvial Soils			**0.50%**
Johns loamy sand (Jo)		0.50%	
Very Poorly Drained Soils			**7.10%**
Byars loam (By)		3.80%	
Johnston sandy loam (Js)	Frequently Flooded	2.50%	
Pantego fine sandy loam (Pa)		0.80%	
Poorly Drained Soils			**38.28%**
Bibb sandy loam (Bb)	Frequently Flooded	0.08%	
Coxville sandy loam (Cx)		10.80%	
Elloree loamy sand (Eo)	Frequently Flooded	1.20%	
Lumbee loamy sand (Lu/Lm)	Frequently Flooded	4.60%	
Mouzon fine sandy loam (Mo)	Frequently Flooded	7.80%	
Rains sandy loam (Ra)		13.80%	
Somewhat Poorly Drained Soils			**11.50%**
Dunbar sandy loam (Dn)		0.80%	
Lynchburg fine sandy loam (Ly)		9.50%	
Ocilla loamy sand (OcA)	0-2% slopes	0.60%	
Stallings loamy sand (Sa)		0.60%	
Moderately Well Drained Soils			
Clarendon loamy sand (CdA)	0-2% slopes	2.10%	**21.10%**
Duplin loamy sand (DpA)	0-2% slopes	1.00%	
Goldsboro sandy loam (GoA)	0-2% slopes	18.00%	
Well Drained Soils			**20.90%**
Ailey sand (AeC)	6-10% slopes	0.20%	
Bonneau sand (BoB)	0-4% slopes	2.50%	
Dothan loamy sand (DaA/B)	0-6% slopes	4.10%	
Faceville loamy sand (FaA)	0-2% slopes	0.50%	
Fuquay sand (FuB)	0-6% slopes	1.50%	
Noboco loamy sand (NoA/B)	0-6% slopes	11.40%	
Troup sand (TrB)	0-6% slopes	0.70%	
Excessively Drained Soils			**0.20%**
Alpin sand (ApB)	0-6% slopes	0.20%	
Somewhat Excessively Drained Soils			**0.20%**
Blanton sand (BlB)	0-6% slopes	0.20%	

of Lynchburg-Goldsboro-Rains soils that range from moderately well drained to poorly drained loamy soils with a loamy subsoil. Similar to those soils, the corridor then passes through the Goldsboro-Noboco-Rains Association, which ranges from poorly drained to well drained loamy or sandy soils with a loamy subsoil.

The section of the corridor that passes through Four Hole Swamp is the poorly drained Mouzon-Elloree Association. These are loamy and sandy soils that have a loamy subsoil in flood plains.

The proposed transmission line crosses 27 soil series (DeFrancesco 1988 and Long 1980). Table 1 briefly summarizes the soils by type and quantity found along the corridor.

The soils in the project area closely parallel the physiographic regions crossed by the corridor: the upper elevations with generally well drained, sandy soils; and the low swampy areas of the Edisto and drainages where the water table may be within a few feet of the ground level. Few historic or prehistoric sites are expected on the very wet soils. Historic occupation, especially during the late nineteenth and early twentieth centuries, is expected on upland or sloping, well drained soils suitable for agriculture. Earlier historic sites may occasionally be found on the margins of swamp bottoms, but are not common in this area. Prehistoric sites are expected to be uncommon in the upland areas remote from a water source, and instead are more likely to occur adjacent to the hardwood bottom swamps.

Over half of the transmission corridor is composed of somewhat poorly drained to very poorly drained soils. Just over 20% of the corridor has moderately well drained soils, which on site tended to be damp due to the numerous rains that occurred during the survey. Well drained soils compose just over 20% of the corridor, which may indicate the low number of sites (n=6) that were found over the 40 mile corridor.

Historically these sandy soils have been recognized to have low fertility. During the early nineteenth century, Mills commented that local farmers were beginning to more aggressively deal with the nutritional deficiencies of the soil:

> The planters now improve their lands by manuring the corn hills either with cotton seed or swamp mud, throwing up in pens in the fall season, to remain during the winder. By mixing with it cotton seed, stable manure, or decayed vegetables, its fertilizing qualities are greatly increased (Mills 1972 [1826]:660).

Floristics

In the early nineteenth century Mills commented that the river lands -- especially those adjacent to the Edisto -- were dominated by "the magnolia, beech, willow, ash, elm, oak, birch, walnut, and hickory" while in the deeper swamp were "large groups of cypress, loblolly, bay, sweet bay, maple, tupelo, and poplar trees of an immense height and circumference" (Mills 1972 [1826]:658). In contrast, the uplands were dominated by pines.

Today there are two major categories of plant communities, based primarily on topographic location, which exist in the project area. The first category consists of upland vegetation. Supported here are a mixture of coniferous and deciduous forests dominated by pines and broadleaf taxa such as upland oaks, sweetgum, hickories, and various understory species. Incorporated may be small upland depressions and drainages, which contain more hydric species.

Portions of the upland area were found to contain pine forest, typically found on soils of low fertility, high acidity, and excessive drainage. Most often these areas have been subjected to extensive disturbance, including repeated logging operations, and the pine represent an early stage of revegetation. Several areas of hardwood forest exist in the project area, where oaks, maple, sweetgum, black gum, and mockernut hickory are prevalent. More common, however are mixed forests, containing both pines and hardwoods.

Lowland forests, which account for the second category, are located on the floodplains and swamps of the corridor. These floodplain soils are forested with bald cypress, gum, sycamore, water hickory, lowland oaks, soft maples, willows, and other herbaceous species (Kovacik and Winberry 1987:45).

The survey area, however, has been extensively altered by modern land-use activities. Many of the forests have been removed for cultivation and today about half of the project corridor is open and under cultivation.

Climate

This portion of South Carolina is dominated by the movement of systems across the country, but there are relatively few complete exchanges of air masses in the summer. This results in few breaks in the midsummer heat, with temperatures ranging from the high 80s to the low-90s. In contrast, winters are mild and relatively short. There are 45 inches of annual precipitation, with nearly 27 inches falling in the growing season (DeFrancesco 1988:2).

Like elsewhere in the state, Mills distinguished between the swamp lands and the sand lands in his assessment of Orangeburg's health:

> the sandhill section of this district presents as fine and healthy a climate as any country can boast of. Diseases are rare here . . . . Along the margins of the creeks and rivers, and within the influence of swamps, bays, and stagnant ponds, fevers and agues, bilious remittents, typhus, and other inflammatory diseases prevail (Mills 1972 [1826]:664).

PREHISTORIC AND HISTORIC SYNOPSIS

Previous Research

Orangeburg, for its size, has received relatively little attention. Derting et al. (1991) cite only 27 studies dealing with the county. Of these 13, or nearly half, are the result of road projects and an additional eight represent other forms of cultural resource studies, only three of which represent any significant aerial extent. The remaining six reports involve a variety of other research, with three specifically associated with work at the Alan Mack site (38OR67).

The Alan Mack site may be the best-known archaeological site in Orangeburg County. It attracted considerable attention in the early to mid-1980s, culminating in its nomination to the National Register of Historic Places. The site exhibits nearly 30 inches of stratified deposits running from at least the Early Archaic (characterized at the site by Palmer points). Above this are levels representing Kirk, Guilford, Savannah River cultures. Above these are somewhat mixed deposits of Deptford and perhaps later pottery. Unfortunately, no publications are available for the site beyond a series of papers presented at the Archaeological Society of South Carolina Annual Conference and occasional reports in the society newsletter. Nevertheless, this site is very similar to the Cal Smoak site (38BM4) in nearby Bamberg County for which there is a very detailed report (Anderson et al. 1979).

More recently, several surveys have been performed around the project corridor. All are compliance projects and generally reveal few archaeological sites. These include surveys on the nearby quarry (Norris 2004a), bridge replacements (Sheffield 2004), industrial parks (Fletcher and Harvey 1999), and substations (Norris 2004b).

Prehistoric Overview

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977). The Paleoindian occupation, while widespread, does not appear to have been intensive. Points usually associated with this period include the Clovis and several variants, Suwannee, Simpson, and Dalton (Goodyear et al. 1989:36-38).

At least one Paleoindian point has been found in the Calhoun area, to the north of the current project area, reportedly from the Little Bull Swamp Creek drainage (Goodyear et al. 1989:33). This pattern of artifacts found along major river drainages has been interpreted by Michie to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 1000 B.C., does not form a sharp break with the Paleo-Indian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture.

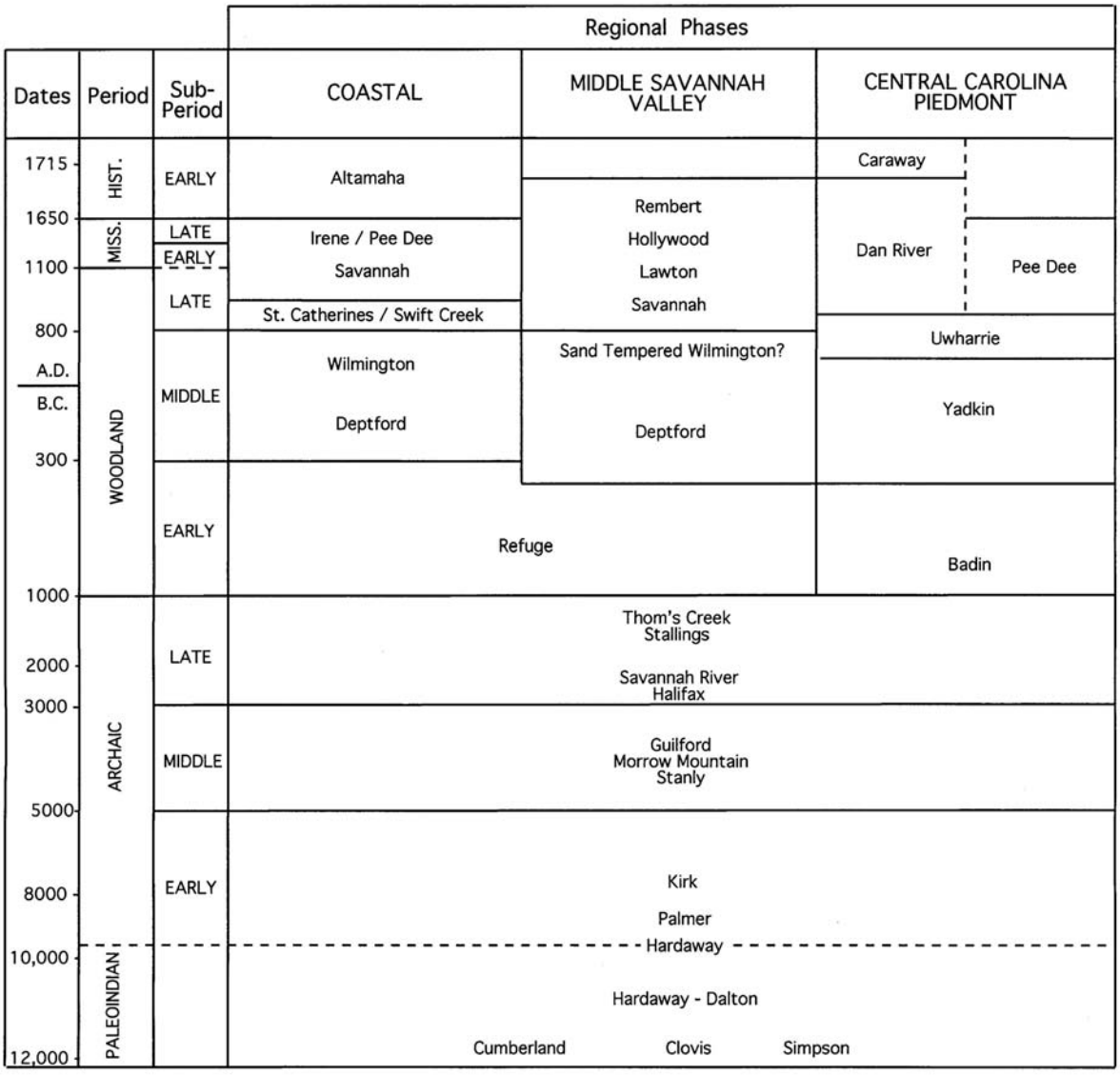


Figure 6. Generalized cultural sequence for South Carolina.

The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the Orangeburg County area. Archaic period assemblages, characterized by corner-notched, side-notched, and broad stemmed projectile points, are common in the vicinity, although they rarely are found in good, well-preserved contexts.

The Woodland period begins, by definition, with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast, about 1000 B.C. in the Upper Coastal Plain, and much later in the Carolina Piedmont, perhaps 500 B.C. It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2000 to 500 B.C. was a period of tremendous

change.

The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish. Various calculations of the probable yield of deer, fish, and other food sources identified from some coastal sites indicate that sedentary life was not only possible, but probable. Further inland it seems likely that many Native American groups continued the previous established patterns of band mobility. These frequent moves would allow the groups to take advantage of various seasonal resources, such as shad and sturgeon in the spring, nut masts in the fall, and turkeys during the winter.

The South Appalachian Mississippian period, from about A.D. 1100 to A.D. 1640 is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest coastal phases are named the Savannah and Irene (known as Pee Dee further inland) (A.D. 1200 to 1550).

However little we know about the various small coastal tribes, considerably less is known about the protohistoric and historic tribes in the Upper Coastal Plain. The study area is situated just south of the Congaree and southwest of the Santee. Mooney (1894:80) devotes a modest two paragraphs to the Congaree and only slightly more to the Santee.

He notes that in 1701, Lawson found the Congaree "on the northeastern bank of the river below the junction of the Wateree" (Mooney 1894:80). In fact, Lawson's account (Lefler 1967:33-35) is the most detailed available for the tribe. He describes their town as consisting "not of above a dozen Houses, they having other stragling Plantations up and down the Country." He reported that they had lost much of their population to smallpox and other European diseases; in spite of this the Congarees were reported to be "kind and affable to the English, the Queen being very kind, giving us what rarities her Cabin afforded, as Loblolly [a thick gruel] made with Indian Corn, and dry'd Peaches" (Lefler 1967:35). Taukchiray suggests that this village was located on Pinetree Creek, although no archaeological effort has been made to locate the settlement (Hicks 1998:48).

Mooney reports that by 1715 their settlements had shifted to the south bank of the Congaree, perhaps on Big Beaver Creek (Mooney 1894:80). Taukchiray expands on this, suggesting "in 1712-1715, the Congaree lived on Congaree River -- first on the west side (now Calhoun County), then on the east side (now Richland County)" with some "on the north/northeastern side of upper Congaree River around Gills and Mill Creeks, on the outskirts of present-day Columbia" (Hicks 1998:50).

The 1715 Yemassee War further reduced their numbers and destabilized their society. Taukchiray suggests that they left their Congaree heartland in late 1716 and moved to the "northwest side of the Waccamaw River in what is now Horry County" (Hicks 1998:50). They stayed in this area until joining the Catawba about 1736. Although largely amalgamated by the Catawba, Taukchiray reports that at late as 1760 one of the Catawba headmen was known to the English as "Congaree Jimmy" (Hicks 1998:50).

For the Santee we know that Lawson found them in the vicinity of the Santee Indian mounds in 1701 (Lefler 1967:25-29; Mooney 1894:79). Again the tribe is reported to live in small hamlets, with Lawson remarking, "there being Plantations lying scattering here and there, for a great many Miles" (Lefler 1967:25). In fact, the settlements continued up river at least to Jacks Creek, and there were hunting camps at least as far up as the High Hills of Santee (Hicks 1998:30).

Mooney reports that just prior to the

Yemassee War there were still two villages about 70 miles from Charleston and perhaps as many as 160 individuals (Mooney 1894:80). Taukchiray provides a little more detail, revealing that the remains of the tribe were captured by the English and Etiwan Indians and transported to Charleston. There the men were shipped to the West Indies as slaves and the women and children were turned over the Etiwans as slaves (Hicks 1998:30), marking the end of the tribe.

Historic Synopsis

The earliest settlement in the area appears to have begun with the 1704 grant to Robert Sterling of 570 acres on Lyons Creek -- in what is today Calhoun County. Situated about 4 miles south of St. Matthews on the Charleston Road, this seems to have served as a focus for additional settlement, largely by English and French Huguenots, who came to the area between 1735 and 1737 (DeFrancesco 1988:1; Mills 1972 [1826]:656-657).

Settlement in the area was also spurred by the township plan of Governor Robert Johnson in the 1730s. The Amelia Township was situated on the west bank of the Congaree and Santee rivers, with the town site situated at the mouth of the Congaree. Settlement was particularly attracted to the areas of Buckhead, Lyons, and Halfway Swamp Creek (Smith 1977:9). It wasn't until the late 1740s that Amelia began to grow, but it quickly became a planters' parish and by 1757 the population had grown to 700 (Meriwether 1940:49-50). With the end of the Cherokee threat in 1761 the area attracted a second round of growth, with many small planters and farmers coming to the Wateree's west bank, below the shoals (Central Midlands Regional Planning Council 1974:142).

Further to the south, the Orangeburg Township was located on the east bank of the North Fork of the Edisto River, bordering Amelia to the north. The middle and upper sections, notably along the rivers, provided excellent agricultural land and this settlement attracted a variety of German and Swiss settlers. By 1740 the population had reached 500 (Meriwether 1940:45-46).

Originally part of Orangeburg District, the 1785 act divided the district into Lewisburg (along the river), Orange, Lexington (to the north), and Winton (an early version of Barnwell along the Savannah). These counties, however, were abolished in 1791 and the Orangeburg District was reinstituted. By 1804, however, the district was again subdivided, this time into Lexington (1804), Orangeburg, and Barnwell (1800). Consequently, by the time Mills discussed the region in 1820, Orangeburg was an elongated district and Mills observed that, "its figure is very irregular, having a kind of peninsula, or long narrow strip, running between two rivers, upwards of twenty-six miles from the main body of the district" (Mills 1972 [1826]:657).

During the Colonial period Orangeburg was at best a small village, containing several taverns and stores, a courthouse, a jail, both a Lutheran and an Anglican church, and a few small residences (Edgar 1998:163). The jail, built in 1770, was the one which General Sumter:

> besieged and took, during the revolutionary war. The British had a garrison there consisting of 70 militia and 12 regulars. This village was for some time the seat of war. After Lord Rawdon had retreated from Camden, he took up his quarters here, whither he was pursued by Gen. Green, who offering him battle; but his lordship, secure in his strong hold, would not venture out; and Gen. Green was too weak to attack him in his works, with any prospect of success (Mills 1972 [1826]:662-663).

It was also during this same campaign that General Green and his partisans attacked and took over Fort Motte (in what is today Calhoun County) (Edgar 1998:237).

By the second quarter of the nineteenth century, there were only three settlements in Orangeburg. The village of Orangeburg was "not favorably situated for health" according to Mills, although it was "tolerably central to the district." The second was the village of Poplar Spring, about 4.5 miles west of Orangeburg and used primarily as a summer residence. The third settlement was the village of Totness, on the north side of High Hill Creek, about 3 miles from the Congaree River. It, too, was primarily a summer village for the planters, which Mills described as "pleasant . . . and much frequented" (Mills 1972 [1826]:663).

Between 1800 and 1820, the population of the Orangeburg District had increased by over a third, from 10,155 to 15653. But the proportion of white increase was modest, from 5,957 in 1800 to 6,760 in 1820. The African American slave population, however, had more than doubled, from 4,110 to 8,829. This clearly documents the rise of plantations in the region, primarily along the rivers where the best lands were situated. Although Mills comments that there was a lively timber export trade from the district and that the German settlers "made a decent living" from growing corn, "cotton engrosses most attention" (Mills 1972 [1826]:660). It was certainly cotton that supported the increase in African American bondage in the region.

Mills' map of the Orangeburgh District (Figure 7) reveals that the proposed corridor is passing through areas with relatively little settlement. The western portion of the corridor starts just south of Orangeburgh on the west side of the Edisto River. The corridor heads east through what are shown as cotton fields until the line crosses two creeks with Moorer's Mill and Utsey's Mill (neither were found during the survey). On the east side of Four Hole Swamp are two settlements S. Snells and H. Snells, but no additional settlements are shown through the end of the line, which ends in Charleston District (Figure 8).

By 1850 the population had increased to 18,519, with 15,384 (83%) of these being African American slaves. Orangeburg had 1,206 farms, with an average of 150 improved acres. The district produced 614,418 bushels of Indian corn, ranking it 13th (out of 29). Also produced were 1,299,379 pounds of rice, ranking Orangeburg fifth in the state, behind fourth ranked Charleston with 16,906,273 pounds, but ahead of sixth ranked Anderson District (with 956,940 pounds). In spite of the slave population, Orangeburg District produced only 10,024 bales of cotton, ranking it thirteenth (DeBow 1854). Lawrence observed that while wheat was grown, it was affected by rust in the late antebellum and stopped being produced until rust-resistant varieties were introduced after the Civil War. He, too, reports that the region's attention was focused on cotton, which remained the area's primary crop until the mid-twentieth century when its prominence was shattered by soybeans (Lawrence 1963:128).

Orangeburg saw little impact from the Civil War until the end, when Sherman's troops came up the north side of the Edisto, followed the North Fork into the city of Orangeburg, which was burned, and then continued north into what is today Calhoun County, crossing over the Santee River (Glatthaar 1985).

After the Civil War, with slaves no longer providing easy labor for the cotton plantations, the economy was stagnant and a slow period of rebuilding began. The remaining decades of the nineteenth century were focused on the dual goals of restoring the economy and ensuring that African Americans remained in a state as closely as possible resembling bondage.

The hiring of freedmen began immediately after the war, with variable results. The Freedmen's Bureau attempted to establish a system of wage labor, but the effort was largely tempered by the enactment of the Black Codes by the South Carolina Legislature in September 1865. These Codes allowed nominal freedom, while establishing a new kind of slavery, severely restricting the rights and freedoms of the black

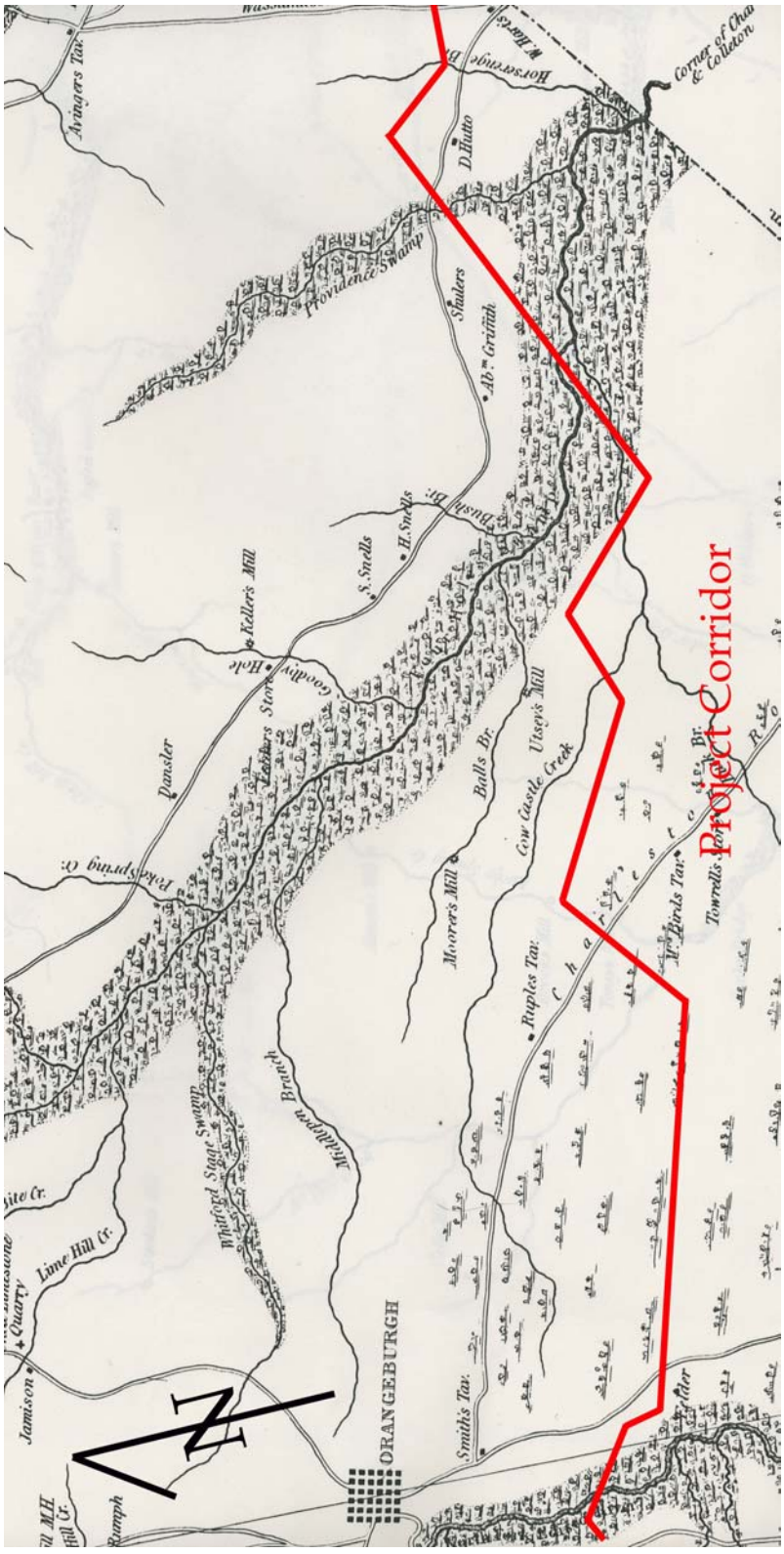


Figure 7. Portion of Mills' *Atlas* showing a portion of the corridor through Orangeburgh District.

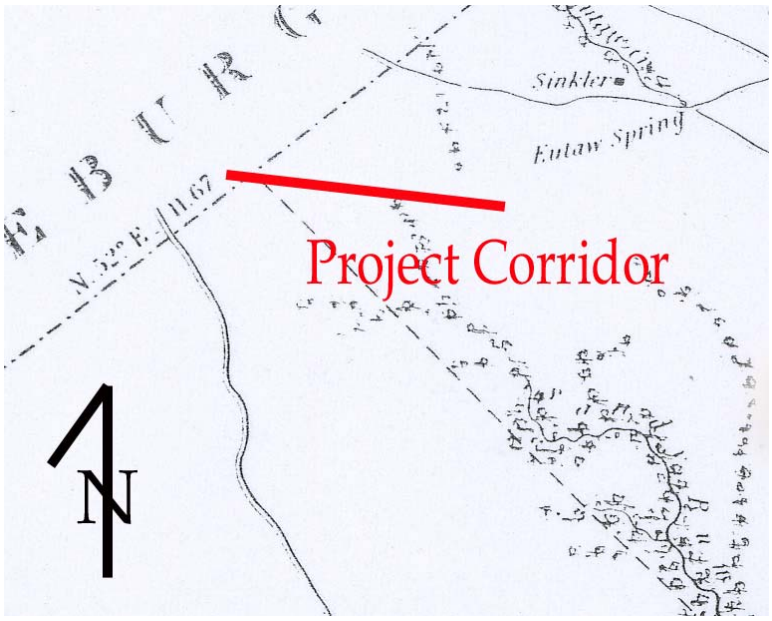


Figure 8. Portion of Mills' *Atlas* showing the eastern portion of the corridor through Charleston District.

majority. Added to the Codes were oppressive contracts that reinforced the power of the plantation owner and degraded the freedom of the Blacks. Many white planters formed "Democratic Clubs," designed to counter the "radical" influence. Members of these clubs resolved not to hire "radicals," or blacks associated with radical politics.

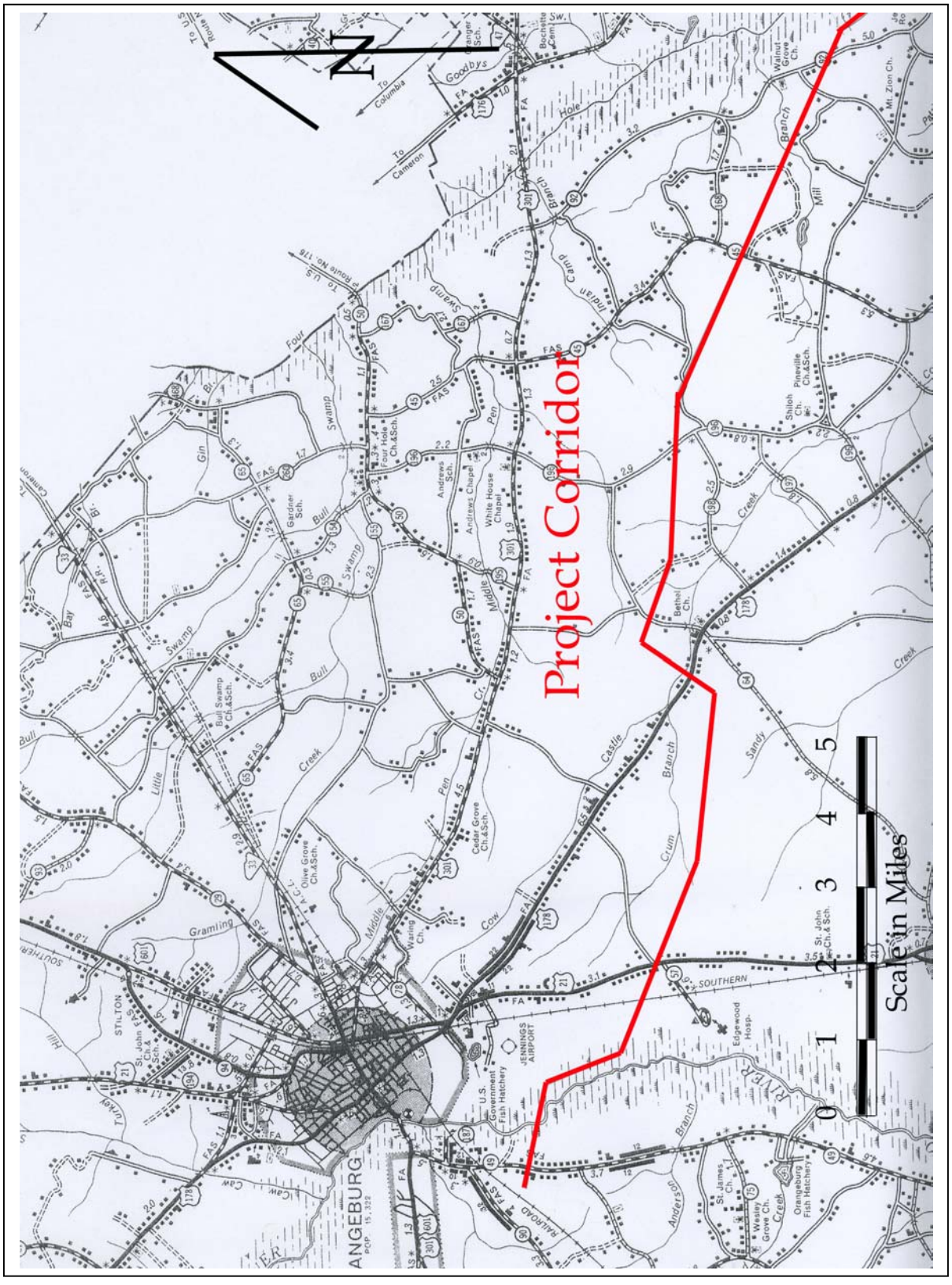
While cash labor was initially used, gradually owners turned away from wage labor contracts, at least partially because of the scarcity of money, but also because of the prevailing belief among whites that blacks were so lazy that with money in their pockets they would not work. In its place two kinds of tenancy -- sharecropping and renting -- developed. While very different, both succeeded in making land ownership very difficult, if not impossible, for the vast majority of Blacks.

Sharecropping required the tenant to pay his landlord part of the crop produced, while renting required that he pay a fixed rent in either crops or money. In sharecropping the tenant supplied the labor and one-half of the fertilizer, the landlord supplied everything else -- land, house, tools, work animals, animal feed, wood for fuel, and the other half of the needed fertilizer. In return, the landlord received half of the crop at harvest. This system became known as "working on halves," and the tenants as "half hands," or "half tenants."

In share-renting, the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer costs. The tenant supplied the labor, animals, animal feed, tools, seed, and the remainder of the fertilizer. At harvest, the crop was divided in proportion to the amount of fertilizer that each party supplied. A number of variations on this occurred, one of the most common being "third and fourth," where the landlord received one-fourth of the cotton crop and one-third of all other crops. In cash-renting the landlord provided the land and housing, with the renter providing everything else and paying a fixed per-acre rent in cash.

An 1884 account of the county revealed that while there was only one textile mill (in the town of Orangeburg), there were 112 grist mills scattered across the countryside, along with 31 flour mills. All were using water power. As a vestige of the area's rice cultivation there was also one rice mill. Cash wages, when paid, were $4 to $6 a month, with rations, a house, and a small garden spot. The county had 322 cotton gins, each turning out about 4 bales a day. One of the most interesting observations was that South Carolina prohibition law was not observed and not enforced -- apparently liquor flowed freely in Orangeburg (Anonymous 1884).

By 1900, the population of Orangeburg County was 59,663, with African Americans still dominating the population (41,442 or nearly 70%). By this time tenancy had become firmly


Project Corridor
Scale in Miles
0 1 2 3 4 5
N
To Columbia
To Cameron
ORANGEBURG
SOUTHERN
JENNINGS AIRPORT
Edgewood Hosp.
U.S. Government Fish Hatchery
Orangeburg Fish Hatchery
Cedar Grove Ch.&Sch.
Olive Grove Ch.&Sch.
Bull Swamp Ch.&Sch.
Four Hole Ch.&Sch.
Andrews Chapel
White House Chapel
Pineville Ch.&Sch.
Shiloh Ch.
Bethel Ch.
Mt. Zion Ch.
Walnut Grove Ch.
St. John Ch.&Sch.
St. James Ch.
Wesley Grove Ch.
Waring Ch.
Gardner Sch.
Andrews Sch.
Bochetta Sw. Cem.
Goodbys
Four Hole Swamp
Indian Camp Branch
Middle Pen Creek
Bull Swamp
Little Bull Swamp
Gramling Branch
Castle Creek
Sandy Branch
Crum Creek
Cow Pen Branch
Mill Branch
Andersons Branch
Caw Caw Creek
Gin Branch
Bay Swamp
Hole Swamp
Pen Branch
Middle Pen Creek
Bull Swamp Creek
Bull Swamp
Little Bull Swamp
Four Hole Swamp
Indian Camp Branch
Mill Branch
Sandy Branch
Crum Creek
Cow Pen

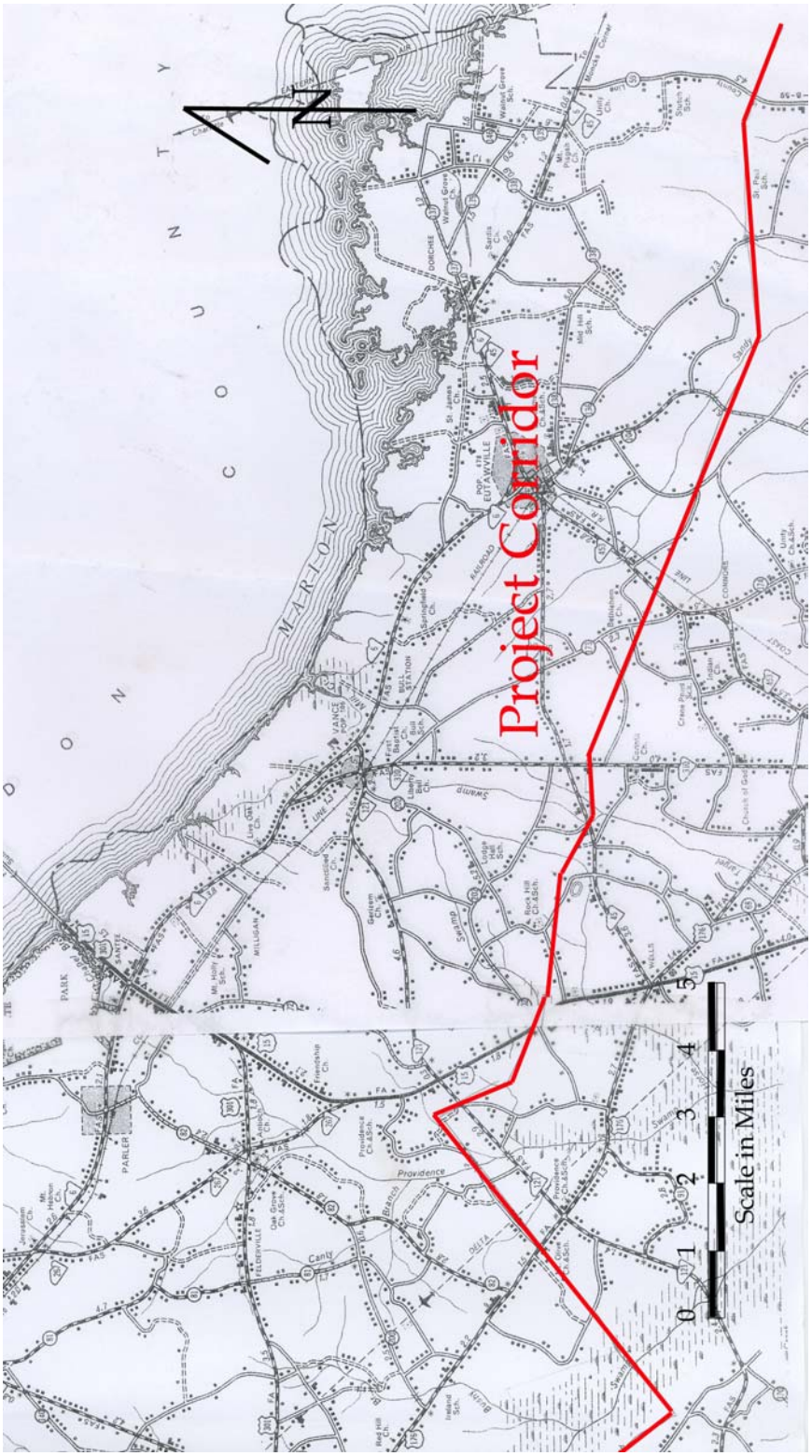


Figure 9 continued. Portion of the *General Highway and Transportation Map of Orangeburg County* showing the eastern portion of the corridor.

established -- there were 8,408 farms in the county, with an average size of just under 80 acres. Nearly 55% of the farms (n=4,613) were operated by cash tenants.

Nevertheless, Orangeburg recovered with a vengeance. By 1900, the county produced 1,172,520 bushels of corn, ranking it first in corn production. It's nearest competitor was Sumter with 762,120 bushels. Orangeburg also ranked first in cotton, producing 65,433 bales or 0.55 bale per acre (again its closest competitor was Sumter County, which produced 48,485 bales or 0.52 bale per acre). While a certain amount of Orangeburg's success was related to its size, it seems clear that the farms were generally profitably operated.

Calhoun County emerged in 1908, created from parts of Orangeburg and Lexington counties. It was small however, accounting for only 377 square miles. The population in 1910 was only 16,663.

By 1920 there were 8,558 farms in Orangeburg County, most of which (n=4,037 or 47%) were between 20 and 49 acres in size. Two-thirds of those farms were operated by African Americans. Of the 8,558 farms, 5,644 (66%) were operated by tenants and 37% of these were share tenants, with an additional 25% being croppers. Orangeburg County was dominated by an agriculture focused solely on cotton and designed to maximize profits to owners while minimizing any hope for small farmers -- black or white -- to ever own land.

The 1920s, however, were the beginning of the end for cotton. Cotton and tobacco prices both collapsed in 1920. This was followed by both droughts and the boll weevil. Edgar observes that in 1930, "after nearly a decade of difficulties, South Carolina agriculture was about to go under. Farmland and buildings had lost more than one-half of their value. One third of the state's farms were mortgaged, and 70 percent of the state's farmers survived on borrowed money" (Edgar 1998:485).

In 1930 over 68% of all farms were operated by tenants. Only a third of these were operated by cash tenants, with the bulk operated by other forms, primarily sharecropping. The mortgage problem was worse in Orangeburg than statewide -- fully two-fifths of the farms were mortgaged, with the average mortgage representing more than 40% of the farm's value.

Cotton production continued to fall, with only a brief upswing during the 1940s as a result of the war effort. While Orangeburg is still part of South Carolina's "cotton belt," production has declined by over 60% since 1949 and today less than 4% of the county's harvested land is devoted to cotton. Of far greater importance are soybeans, corn, wheat and specialty crops, such as cucumbers, watermelons, and cantaloupes (DeFrancesco 1988:2).

The 1951 *General Highway and Transportation Map of Orangeburg County* (Figure 9) shows numerous structures along the 40 mile corridor. While it may appear as though the corridor runs through many settlements, only four historic sites were found. These four late nineteenth to early twentieth century sites, however, do appear to be recorded on the 1951 map. The small section of the corridor that extends into Berkeley County fails to show any structures near the project area.

METHODS

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the center line of the corridor which has a 100-foot right-of-way.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially from the western portion of the corridor, heading east. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were implemented with no significant modifications. A total of 1,160 shovel tests were excavated along the corridor with additional testing for each of the six identified sites.

The GPS positions were taken with a WAAS enabled Garmin 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. However, this was not a vital concern for the study area given the open fields in which that most of the sites were found.

Figure 10. Existing substation at the western end of the corridor.

Architectural Survey

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey would record only those which has retained "some measure of its historic integrity" (Vivian n.d.:5) and which were visible from public roads.

Figure 11. View of I-26 where the corridor crosses.

For each identified resource, we would complete a Statewide Survey Site Form and at least two representative photographs would be taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose


Figure 12. Shovel testing along the corridor.

components may lack individual distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites, the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space,

proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials -- the physical items used on and in the property -- are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites have been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete.

Analysis of the collections followed professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of historic remains follow such authors as Price (1979) and South (1977). Classification of prehistoric materials were defined by such authors as Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986).

RESULTS OF SURVEY

Introduction

As a result of this cultural resources survey, six sites, 38OR280-285, were identified along the corridor. Site 38OR280 is a Middle Woodland scatter; site 38OR281 is an early to mid-twentieth century domestic scatter; site 38OR282 is a late nineteenth to early twentieth century domestic site; site 38OR283 is a Middle Woodland to Mississippian and sparse eighteenth to early nineteenth century scatter; site 38OR284 is a late nineteenth to early twentieth century domestic scatter; and 38OR285 is a late nineteenth to early twentieth century domestic site. All sites are recommended not eligible for the National Register of Historic Places for lack of integrity and inability to address significant research questions.

The architectural survey identified six resources (0212-0216), two structures and three cemeteries, within the 0.5 mile APE. Site 0212 is a ca. 1819 cemetery that is potentially eligible for the National Register; site 0213 is a ca. 1900 house that is recommended not eligible; site 0214 is the Rock Hill Church Cemetery that is recommended eligible for the National Register; site 0215 is a ca. 1800s house that is recommended eligible for the National Register; and 0216, the ca. 1853 Joiner Cemetery, is recommended not eligible for the National Register.

Archaeological Resources

38OR280

Site 38OR280 (Figure 13) consists of a subsurface scatter of Middle Woodland artifacts. The site is situated on a ridge side slope at an elevation of about 175 feet AMSL. The Edisto River is located about 1,000 feet to the west and an unnamed creek is located about 350 feet down slope to the north.

The site (Figure 14) is situated in an existing transmission line right-of-way, but extends to the south into a sparse pine and hardwood forest (which is located within the right-of-way of the proposed transmission corridor).

Shovel tests were performed at the initially proposed 100-foot intervals with the shovel tests at Station 2622+00 (50R100) yielding one Deptford cord-marked sherd. Additional shovel testing was performed at 25-foot intervals along the cardinal directions until two consecutive negative shovel tests were encountered. A total of 22 tests were excavated with three (14%) being positive.

The site produced the well-drained Ailey sands. These soils typically have an Ap horizon of dark grayish brown (10YR4/2) sand to 0.5 foot in depth over a light yellowish brown (10YR6/4)

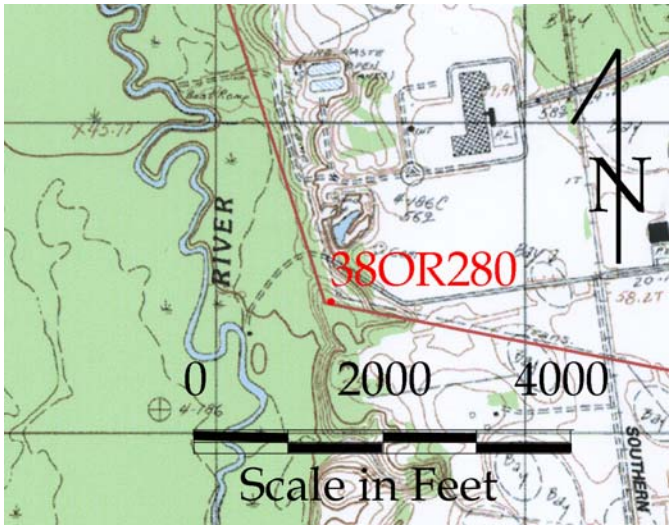


Figure 13. Orangeburg South 7.5′ topographic map showing 38OR280.

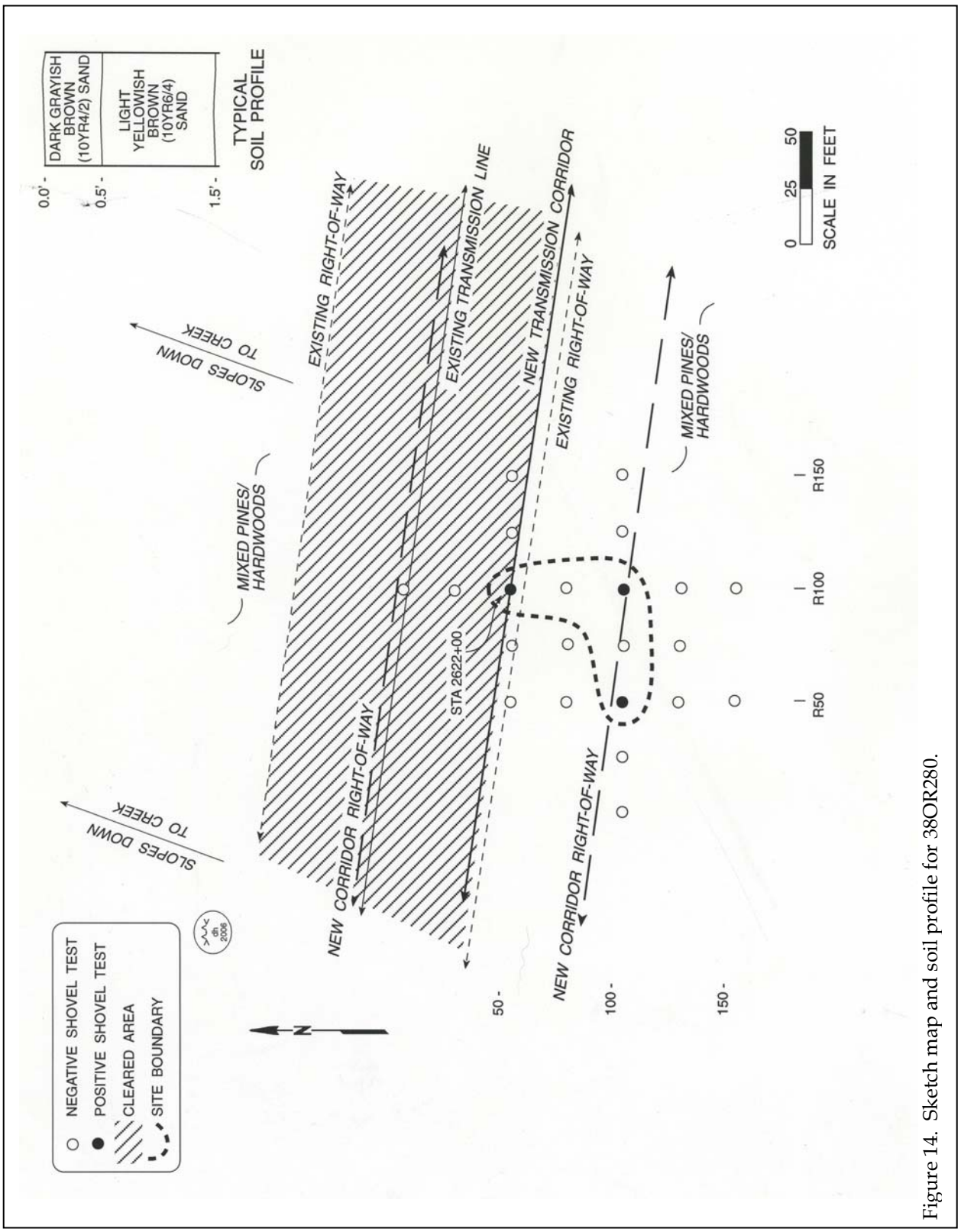


Figure 14. Sketch map and soil profile for 38OR280.

sand that can occur to 2.1 feet in depth. Thisprofile was found in the shovel testing, suggesting little or no soil loss.

As previously mentioned, the site dates to the Middle Woodland. A total of three artifacts were recovered. These include the Deptford cord-marked sherd (as mentioned above), a chert flake (100R50), and a small unidentifiable sherd (100R100). The three positive shovel tests produce a site area of about 50 feet by 50 feet. The central UTM coordinate is 513375E 3699429N (NAD27 datum).

This site produced very few remains with no floral or faunal remains found in the tests. No tests were unusually deep (suggestive of features) or produced unique soil profiles. All three of the remains were found in the top 0.5 foot of soil, indicative of disturbance possibly by logging. In addition, the site is on a ridge side slope, so erosion would have disturbed the remains. In fact, directly down slope to the north is a small creek and although the area is well out of the survey corridor, a surface scatter of prehistoric artifacts was observed. Site 38OR280, however, does not retain enough integrity for it to be potentially eligible for the National Register.

While there are a number of research questions specific to Middle Woodland remains ranging from the refinement of Deptford typologies to the development of settlement models and the exploration of changing subsistence bases, these data sets are far too sparse to provide the level of information necessary to address these questions.

Consequently, we recommend this site as not eligible for inclusion on the National Register of Historic Places and recommend no additional management activities, pending the review and concurrence of the State Historic Preservation Office.

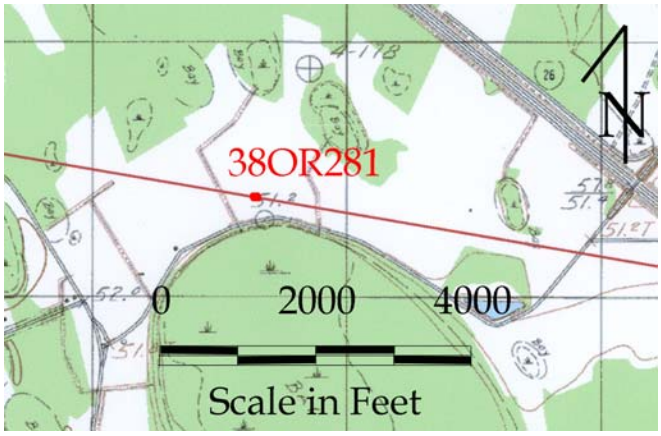


Figure 15. Indian Camp Branch 7.5′ topographic map showing 38OR281.

38OR281

Site 38OR281 (Figure 15) is an early to mid-twentieth century domestic scatter. It is located at an elevation of about 166 feet AMSL. A central UTM coordinate for the site is 527636E 3698369N (NAD27 datum).

Shovel testing was originally completed at 100-foot intervals along the corridor with Station 2120+00 positive (Figure 16). Shovel tests were performed at 25-foot intervals until two consecutive negative tests were encountered. A total of 18 tests were excavated with two (11%) positive.

The site is located in a small grove of vines in a plowed field. Shovel tests were similar to the well-drained Noboco soils, which generally have an Ap horizon of dark grayish brown (10YR4/2) loamy sand to a depth of 1.0 foot over a light yellowish brown (10YR6/4) loamy sand.

As previously mentioned, the site appears to date to the twentieth century, although none of the artifacts can be definitively dated (Table 2). For example, whiteware was introduced in 1813, but is still in production today. The aqua soda bottle glass began production in 1920 (Jeter 1987) and was still being made into the 1980s.

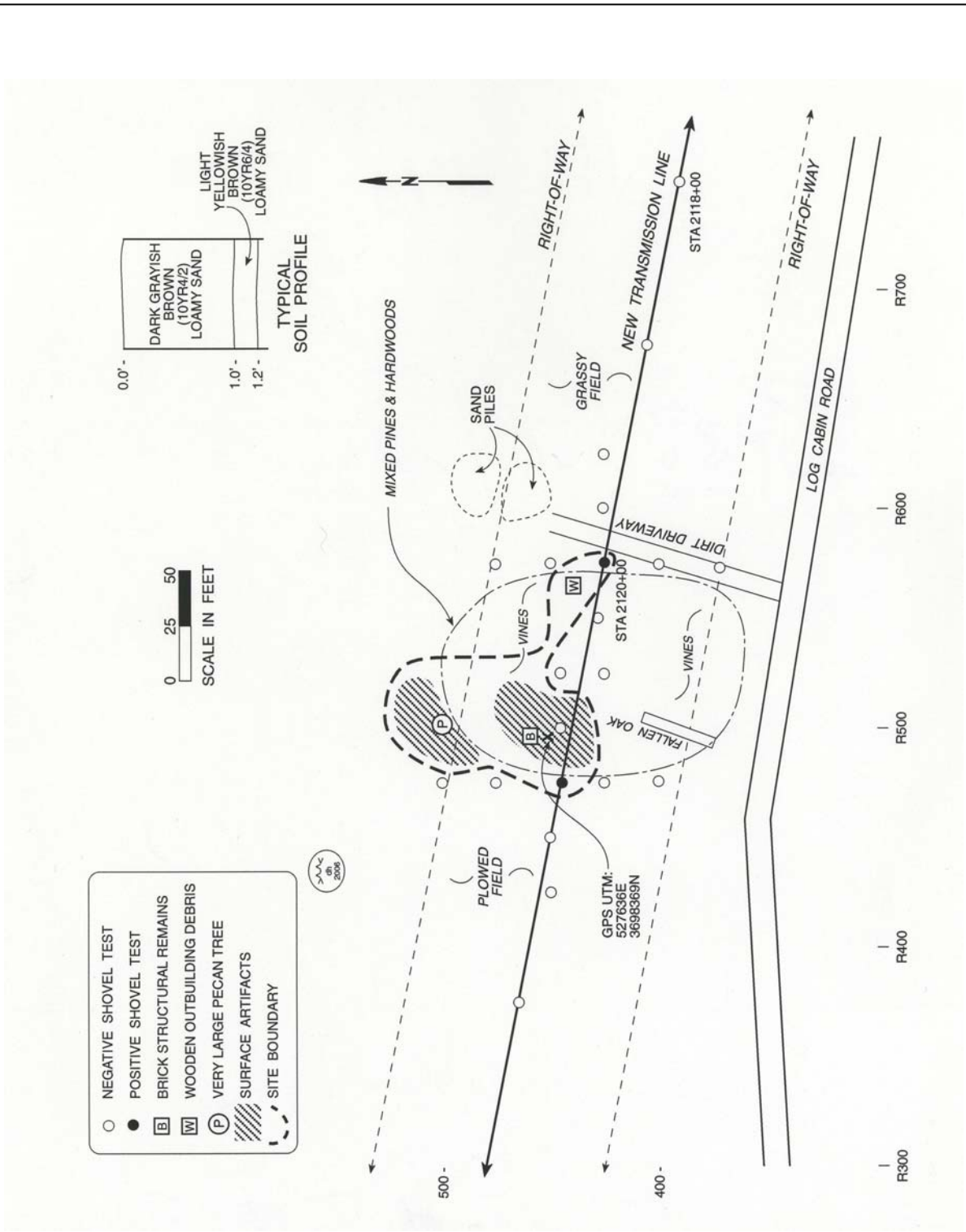


Figure 16. Sketch map and soil profile for 38OR281.

Table 2.
Artifacts from 38OR281

	450R475	450R575	Surface	
Kitchen Group				
Whiteware, undecorated			4	
Glass, clear		1	2	
Glass, aqua soda bottle			2	
Glass, milk	1			
Enamled tinware			2	
Architecture Group				
Window glass	1		2	
Activities Group				
Aluminum bucket			1	
UID metal	1			
TOTAL				**17**

One brick pier from the structure is still standing and the remains of an outbuilding are about 100 feet off the corridor, however, no evidence of a well or privy was found, which could provide in-depth information about the occupant. Only 17 total artifacts were found with 12 noted from a surface collection (all artifacts were noted and discarded in the field). The site has been heavily disturbed by cultivation, which has expanded the site to about 100 feet by 100 feet in size.

This site produced relatively few artifacts and only two data sets (the Kitchen Group produced 13 artifacts, while the Architecture

Group had 3 artifacts. One item is unidentifiable). The items are common for small domestic farmsteads and it is unlikely that new information can be obtained from the sparse remains to address significant research questions such as the lifeways of early twentieth century farmers.

This site is recommended not eligible for the National Register due to lack of integrity from plowing and the inability to address significant research question from the limited data sets and sparse remains. No additional management activity is recommended pending review and concurrence by the State Historic Preservation Office.

38OR282

Site 38OR282 (Figure 17) is a late nineteenth to early twentieth century domestic site situated in the plains at an elevation of about 113 feet AMSL. The site is generally situated in an area of sparse pines, but extends into the right-of-way of an existing transmission line (Figure 18).

Shovel testing was performed at 100-foot intervals along the corridor until Station 1544+00 (550R510) at Ibis Point Road was positive with one piece of undecorated whiteware. Shovel testing was performed at 50-foot intervals until two consecutive negative tests were encountered. A total of 35 tests were excavated with eight (23%) positive. An additional three tests contained only brick.

Shovel test profiles generally resembled the well drained Noboco soils. These soils have an Ap horizon of dark grayish brown (10YR4/2) loamy sand to a depth of 1.0 foot over a light

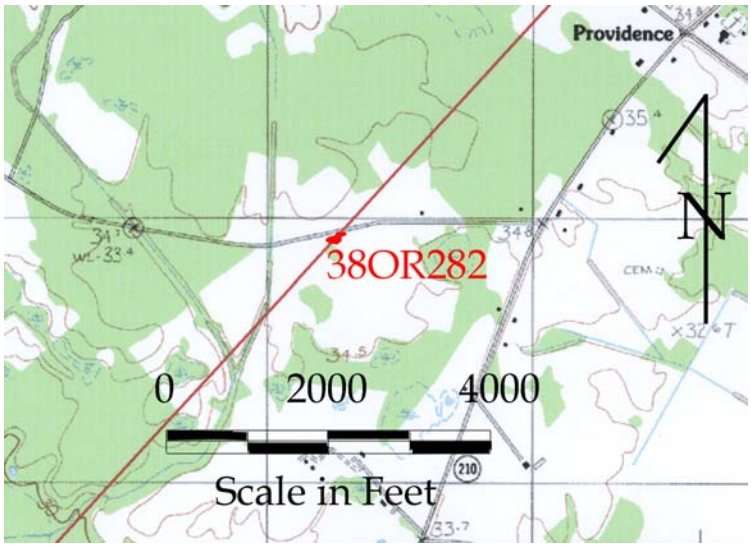


Figure 17. Felderville 7.5′ topographic map showing 38OR282.

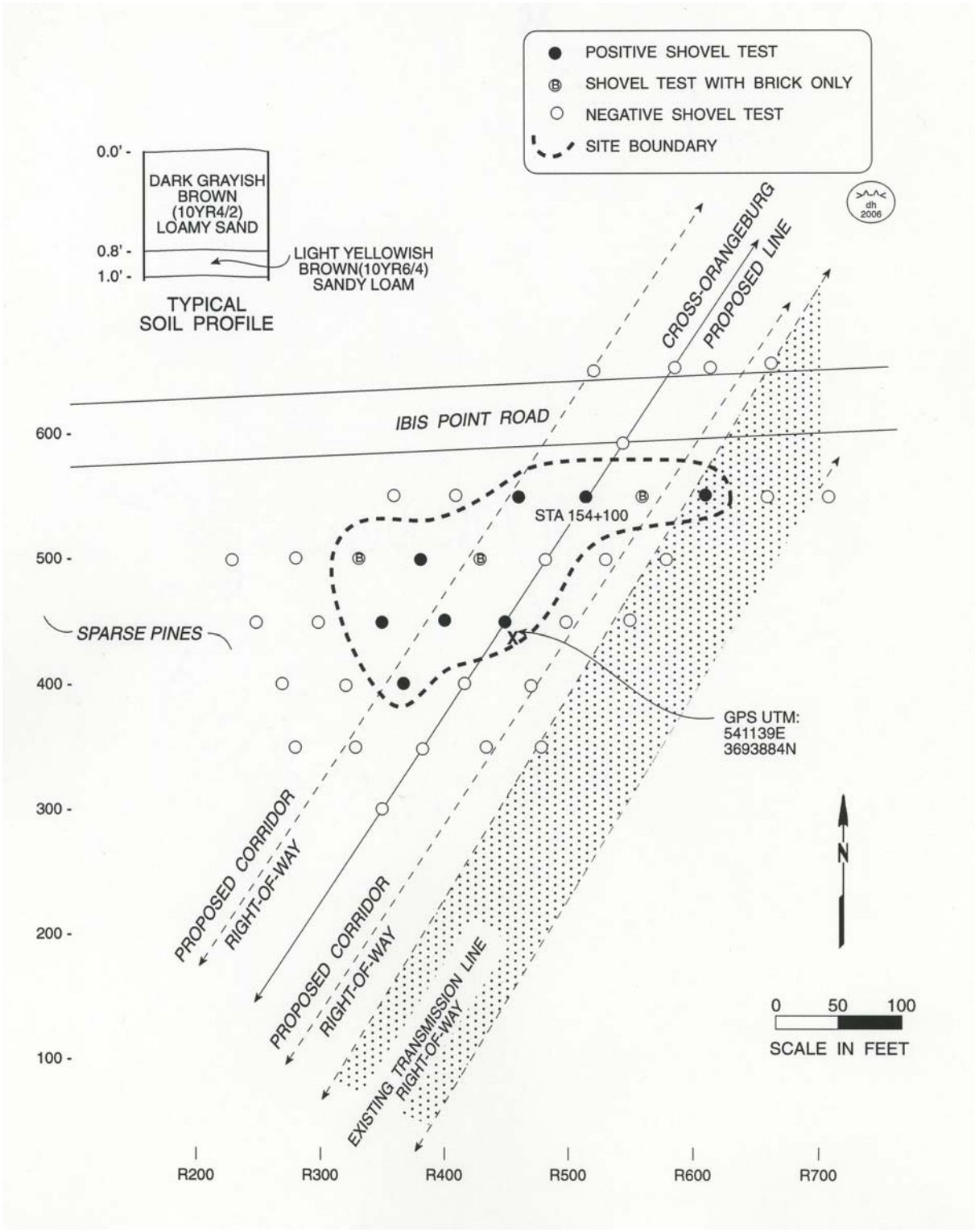


Figure 18. Sketch map and soil profile for 38OR282.

Table 3.
Artifacts from 38OR282

	400R370	450R350	450R400	450R450	500R380	550R460	550R510	550R610	TOTAL
Kitchen Group									
Whiteware, undecorated						1	1		**2**
Whiteware, pink tinted								1	**1**
Porcelain, pink/gray stripe					1				**1**
Glass, clear	3	12	3		1				**19**
Glass, aqua		1	1						**2**
Glass, dark green		1							**1**
Glass, green		1							**1**
Glass, manganese		1		1					**2**
Architecture Group									
Wire cut nail		5	3		1				**9**
UID nail			2	1					**3**
Window glass		3	3						**6**
Activities Group									
UID metal	1	4							**5**
Faunal material					1				**1**
									53

yellowish brown (10YR6/4) loamy sand.

As previously mentioned, the site dates from the late nineteenth to the twentieth century (Table 3). For example, manganese glass was popular in the late nineteenth century (Jones and Sullivan 1985), while tinted whiteware has a Mean Ceramic Date (MCD) of 1941.

The site area, based on the positive shovel tests, is about 150 feet north-south by 250 feet east-west. A central UTM coordinate is 541139E 3693884N (NAD27 datum). Although the site has a second growth of pines, the area appears to have been cultivated after the destruction of the structure. The artifacts are generally small in size and no evidence of a well, privy, or any structural remains were found that would give an indication of the lifeways of the occupants. In addition, the artifacts are common to small domestic farmsteads. It is unlikely that new information can be obtained from the remains to address significant research questions.

Because of the site's lack of integrity through razing and cultivation, and the inability to address significant research questions about turn-of-the-century farmsteads, site 38OR282 is recommended not eligible for the National

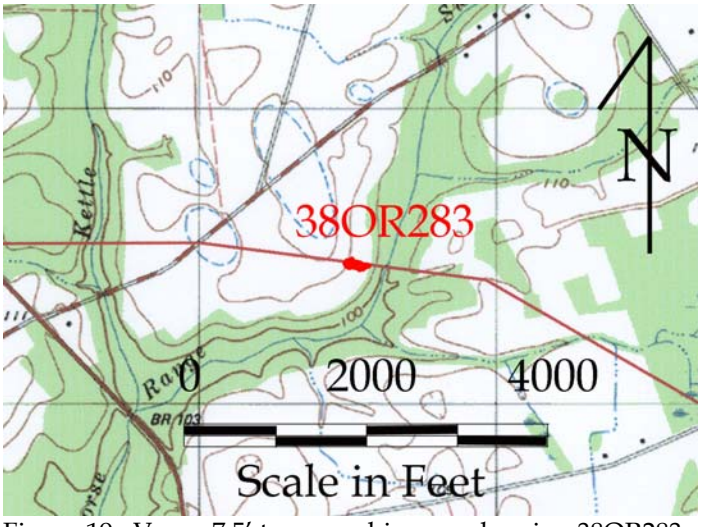


Figure 19. Vance 7.5′ topographic map showing 38OR283.

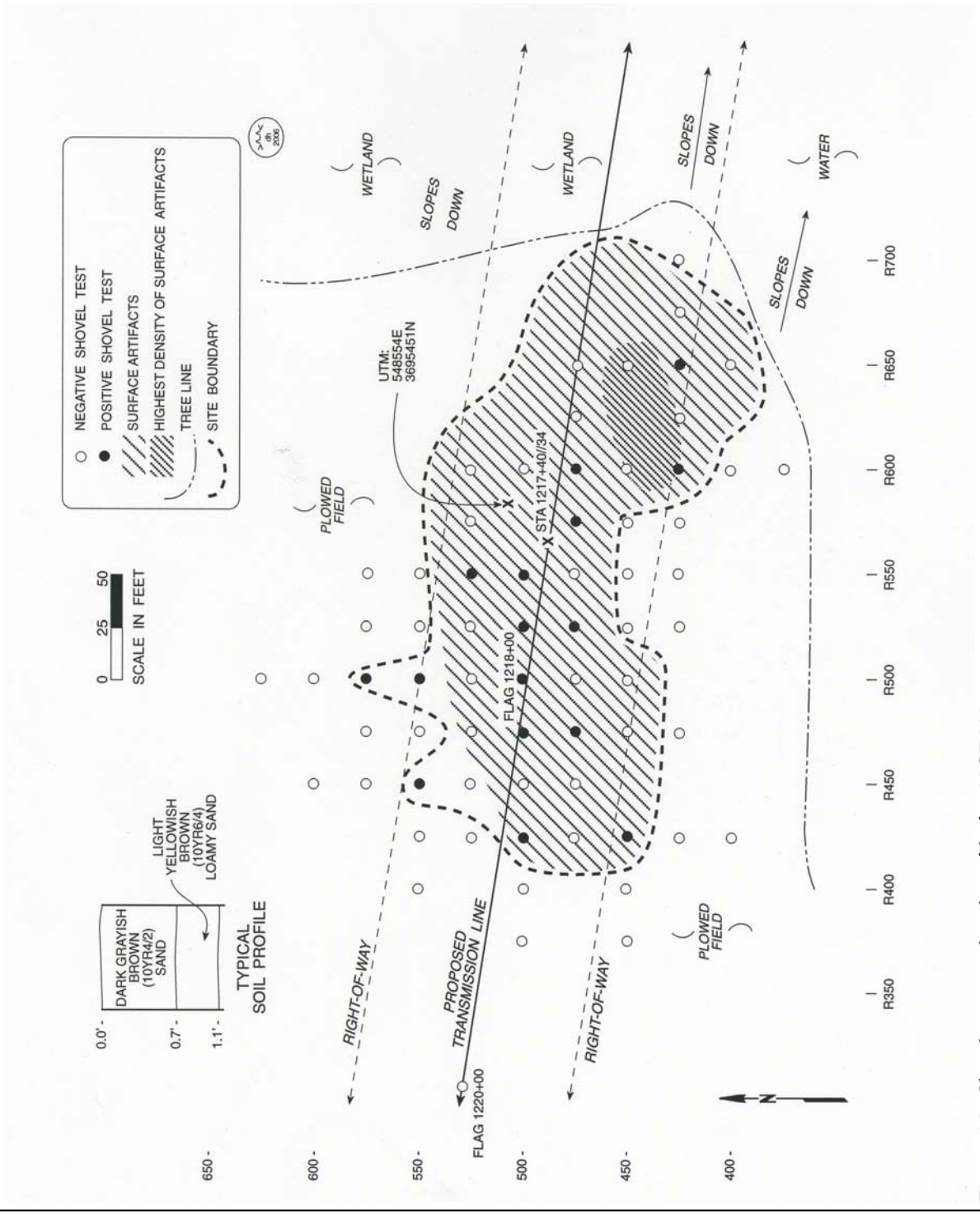


Figure 20. Sketch map and soil profile for 38OR283.

Register of Historic Places. No additional management activity is recommended pending review and concurrence by the State Historic Preservation Office.

38OR283

Site 38OR283 (Figure 19) consists of a surface and subsurface scatter of Woodland to Mississippian remains and a sparse scatter of eighteenth to nineteenth century artifacts. It is situated on somewhat level topography net to Horse Range Swamp. The elevation of the site is about 110 feet AMSL. The site is located in a plowed field that has grown cotton and peanuts (Figure 20).

Shovel tests were excavated at the proposed 100-foot intervals with the test at Station 1218+00 positive. Close interval testing was performed at 25-foot intervals along the cardinal directions until two consecutive negative tests were encountered. A total of 68 tests were excavated with 16 (24%) positive. A large surface collection was also observed.

The soils at the site were consistent with the well-drained Noboco soils, which have an Ap horizon of dark grayish brown (10YR4/2) loamy sand to a depth of 1.0 foot over a light yellowish brown (10YR6/4) loamy sand. However, some of the tests had the Ap horizon only as deep as 0.7 foot.

As previously mentioned, the site dates to the Middle Woodland, based on the single Deptford check-stamped sherd, and the Mississippian, as shown by the complicated stamped sherds. In addition, a very small historic component, consisting of only two pieces of ceramic, was identified. These ceramics include one lead glazed slipware, which has a MCD of 1733, and a blue handpainted pearlware, which has a MCD of 1800.

While a relatively large number of artifacts (n=128) were found, all pieces were small, generally measuring less than one inch in diameter (Table 4). This is likely the result of logging and the years of cultivation. In addition, a higher density of artifacts was found down the gentle slope toward the swamp, indicative of erosion. An estimated site dimension given the positive shovel tests and surface collection is 150 feet north-south by 300 feet east-west. A central UTM coordinate for the site is 548554E 3695451N (NAD27 datum).

Few data sets were identified for the prehistoric site. No floral or faunal remains were

Table 4.
Artifacts from 38OR283

	425 R600	475 R475	475 R525	475 R575	475 R600	500 R425	500 R475	500 R500	500 R525	500 R550	525 R550	550 R450	550 R500	575 R500	650 R425	Surface	**TOTAL**
Historic																	
Slipware, lead glaze																1	**1**
Pearlware, blue handpaint																1	**1**
Prehistoric																	
Small sherds	2	1	1	1	1	1	1	1	1		2	1		1	1	60	**75**
Sherd, Deptford checked stamp																1	**1**
Sherd, Deptford simple stamp																1	**1**
Sherd, Pee Dee complicated stamp																1	**1**
Steatite fragment																1	**1**
Worked stone																8	**8**
Projectile point tip, chert																1	**1**
Flake, chert		1			1				2	1			1			22	**28**
Flake, quartz																3	**3**
Flake, quarzite																7	**7**
																	128

found and no tests were unusually deep (suggestive of features) or produced unique soil profiles. All of the remains were found in the Ap horizon of soil, which occurred to a depth between 0.7 and 1.0 foot. The plowing would have likely damaged any features that may have been present.

While there are a number of research questions specific to Woodland and Mississippian remains ranging from the refinement of typologies, to the development of settlement models, to the exploration of changing subsistence bases, these data sets are too sparse to provide the level of information necessary to address these questions.

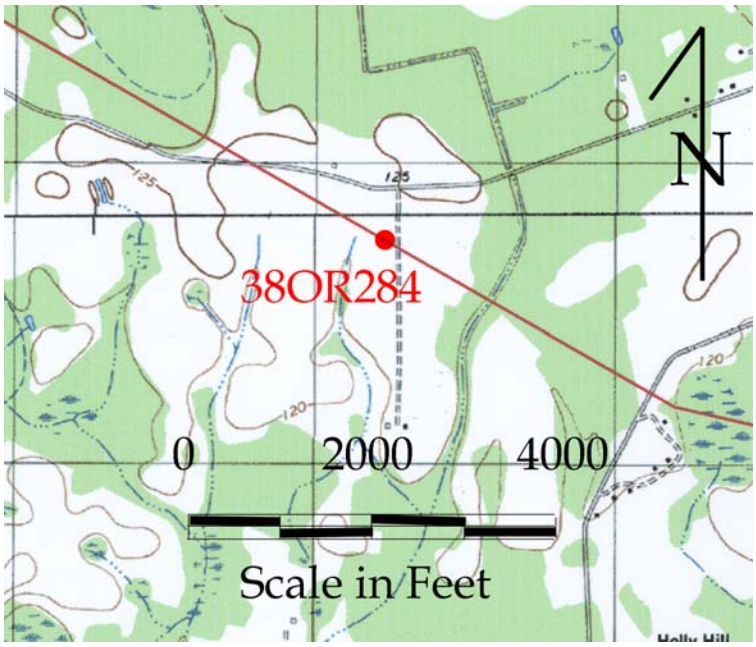


Figure 21. Holly Hill 7.5′ topographic map showing 38OR284.

We recommend this site as not eligible for inclusion on the National Register of Historic Places due to lack of integrity by plowing and logging and the inability to address significant research questions. No additional management activities are required, pending review and concurrence of the State Historic Preservation Office.

38OR284

Site 38OR284 (Figure 21) is a sparse late nineteenth to early twentieth century scatter located on level topography at an elevation of about 110 feet AMSL. A central UTM coordinate for the site is 555274E 3692831N (NAD27 datum).

The site is in a heavily plowed field near the intersection of Surfside Drive and Fenway Court and extends into an existing power line right-of-way (Figure 22).

Shovel testing was performed at the originally proposed 100-foot intervals, however, the site was found by the surface scatter or artifacts. Shovel tests were performed at 50-foot intervals along the proposed corridor, however all the tests were negative. Plowing has removed all nearby station numbers, but the station number about 1,000 feet southeast at the woods line was 960+00. The station that would have been at the site would be about 970+00.

The soils in the field consisted of the well-drained Dothan loamy sands, which have an Ap horizon of dark grayish brown (10YR4/2) loamy sand to 0.6 foot in depth over a yellowish brown (10YR5/4) sandy loam to 1.1 feet in depth.

The site was sparse, with plowing extending the site to 200 feet square. Artifacts were analyzed and discarded in the field, but of the 21 artifacts found, all were Kitchen related. These include manganese glass (n=4), clear glass (n=7), aqua glass (n=5), cobalt glass (n=2), whiteware (n=1), and a milk glass jar liner (n=1). The last item was a porcelain doll fragment. While some brick fragments were noted, no other architectural artifacts were found.

Dating is somewhat problematic given the sparse remains, however, a general date is from

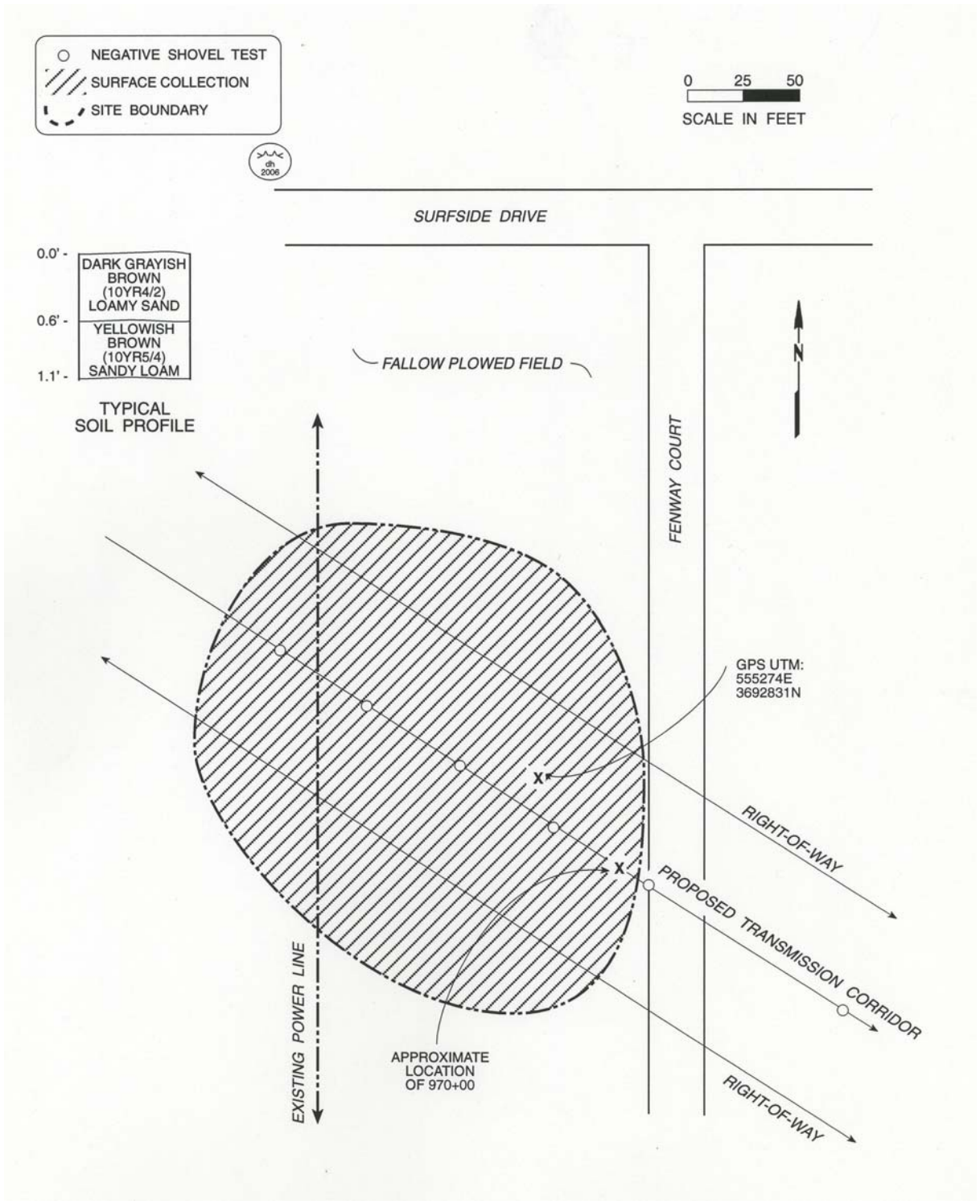


Figure 22. Sketch map and soil profile for 38OR284.

the late nineteenth to early twentieth century. For example, manganese glass was popular in the late nineteenth century (Jones and Sullivan 1985), however whiteware began production in 1813 and is still being produced today. The milk glass jar liner (also called "porcelain" by catalogs) was being sold in the 1895 *Montgomery Ward & Co.* catalogue (Boris 1895[1969]:545), however, by 1936 the liners were absent, having been replaced by rubber rings (*Montgomery Ward* 1936).

The porcelain doll fragment appears to be part of the back of the head and is labeled "Germany." This mark is likely from the Heubach factory in Germany that made these dolls into the early twentieth century (Bristol 1997:106).

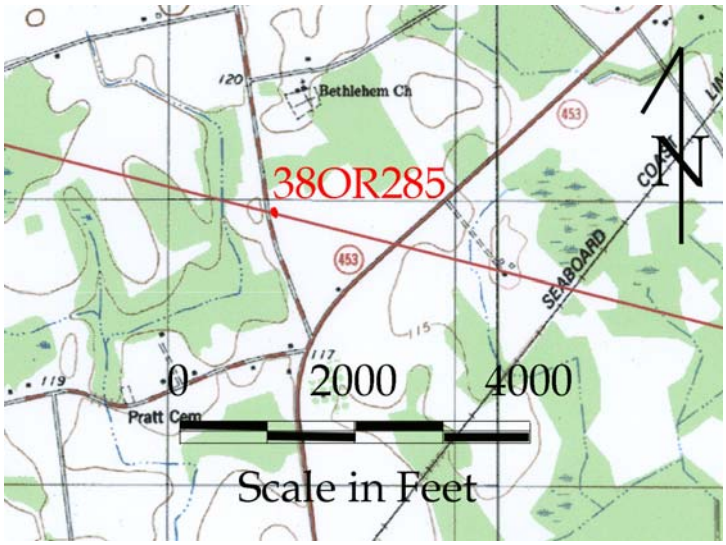


Figure 23. Holly Hill 7.5′ topographic map showing 38OR285.

No structural remains were visible and given the extensive plowing and lack of artifacts in the shovel tests, it is unlikely that intact remains would be found. The artifacts were not found in a distinct cluster and they all tended to be small in size, indicative of the plowing. No indication of a well or privy was identified, which could be useful in analyzing the lifeways of turn-of-the-century farmsteads.

Site 38OR284 is recommended not eligible for the National Register for its lack of integrity through plowing and the inability to address significant research questions about historic farmsteads. No additional management activity is recommended pending review and concurrence by the State Historic Preservation Office.

38OR285

Site 38OR285 (Figure 23) consists of a late nineteenth to early twentieth century domestic scatter. It is located on a level plain at an elevation of about 120 feet AMSL. A central UTM coordinate for the site is 557372E 3691956N (NAD27 datum).

The site was discovered when shovel testing at the originally proposed 100-foot intervals revealed a positive test just east of Gemini Road, across from Station 897+45. Close interval testing was performed at 50-foot intervals to establish the boundaries of the site, which is estimated at 150 feet east-west by 200 feet north-south. However, the northern boundary was not definitively determined due to the distance from the proposed right-of-way.

The soils represented the well-drained Noboco loamy sands. These soils have an Ap horizon of dark grayish brown (10YR4/2) loamy sand to 1.0 foot in depth over a light yellowish brown (10YR6/4) loamy sand.

As previously mentioned, the site represents a late nineteenth to early twentieth century domestic scatter. For example, manganese glass was popularly used in the late nineteenth century (Jones and Sullivan 1985) while whiteware began production in 1813 and is still being produced today. A portion of a clear glass panel bottle base was found with a mark from the Illinois Glass Co. in Allton, Illinois, which was in business from 1873 to 1929. The mark was used from 1916 to 1929.

The site is somewhat sparse (37 total

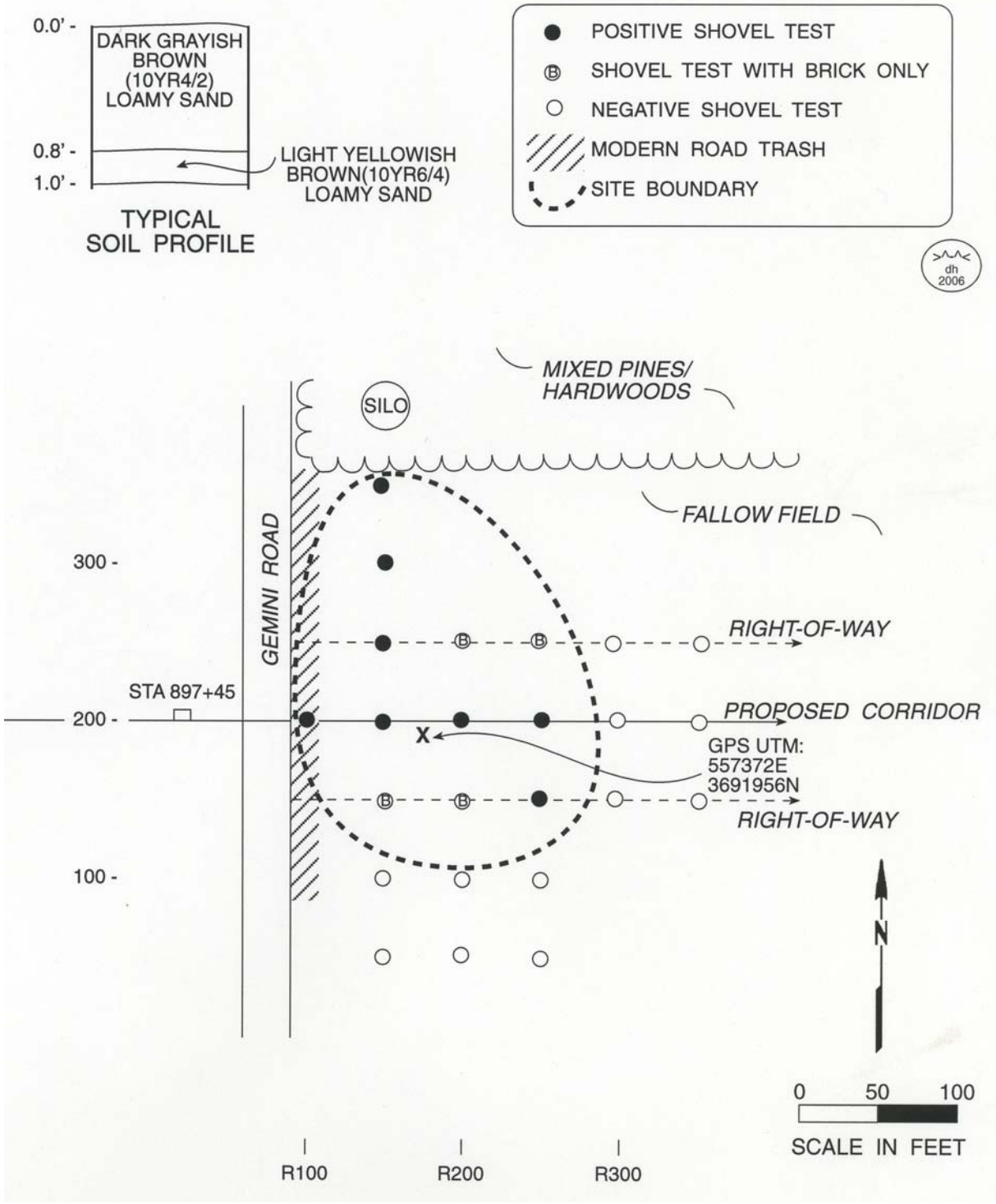


Figure 24. Sketch map and soil profile for 38OR285.

Table 5.
Artifacts from 38OR285

	150R250	200R100	200R150	200R200	200R250	250R150	300R150	350R150	TOTAL
Kitchen Group									
Whiteware, undecorated					1				**1**
Porcelain, undecorated				1					**1**
Glass, clear	2	1	2	8		1	1	1	**16**
Glass, aqua		1	1					2	**4**
Glass, manganese			1	3	1				**5**
Glass, green						1			**1**
Architecture Group									
Window glass			1						**1**
UID nail			1						**1**
Clothing Group									
Button		1							**1**
Leather fragment					1				**1**
Activities Group									
Iron hook							1		**1**
Chert flake					1				**1**
									34

artifacts (and being located in a heavily plowed field, the pieces tended to be small in size. However, four groups are present including Kitchen Group, Architecture Group, Clothing Group, and Activities Group (Table 5). No features, including possible wells or privies, were identified, although a partially standing silo (Figure 25) is located just inside the woods line to the north. No testing was performed into the woods since it would have been over 100 feet from the current project right-of-say and will not be affected by the proposed transmission line.

Figure 25. View of silo found at 38OR285.

While site 38OR285 did produce a variety of data sets, the number of artifacts is still sparse and common for turn-of-the-century farmsteads. The extensive plowing (which goes to an average depth of 1.0 foot) may have destroyed any architectural footprint that may have been present, such as wells or privies, since no unusually deep profiles were found. While the site may extend into the woods to the north, it is well beyond the survey

right-of-way and will not be affected by the current undertaking.

Site 38OR285 is recommended not eligible for the National Register for its lack of integrity and inability to address significant research questions. No additional management activity is recommended pending review and concurrence by the State Historic Preservation Office.

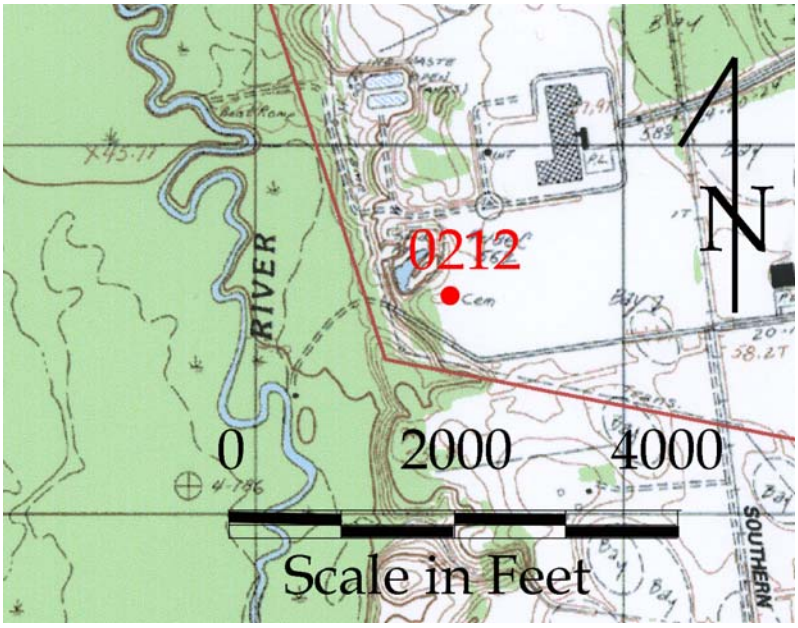


Figure 26. Orangeburg South 7.5' topographic map showing 0212.

Historic and Architectural Resources

As previously discussed, there are no previously recorded National Register buildings, districts, structures, sites, or objects in the study area. A drive of the 0.5 mile APE confirmed these findings.

Several historic resources (0212-0216), however, were identified and recorded due to the proximity to the current survey. Two houses (0213 and 0215) and three cemeteries (0212, 0214, and 0216) were recorded.

Site 0212 is a cemetery located behind the Orangeburg Wastewater Treatment Plant in Orangeburg off Gulbrandsen Road (Figure 26). The earliest date for the cemetery is 1819 (surname is Felder) while the most recent burial is in 1947 (surname of Bishop). There are at least 50 graves associated with the cemetery, which also exhibits such names as Izlar, Stroman, and King (Figure 27). A concrete wall was erected around the cemetery in the 1920s.

While not recorded at the S.C. Department of Archives and History, the S.C. Institute of Archaeology and Anthropology (SCIAA) has the cemetery recorded as part of site 38OR2, which


Figure 27. View of 0212, note the treatment plant to the rear of cemetery.

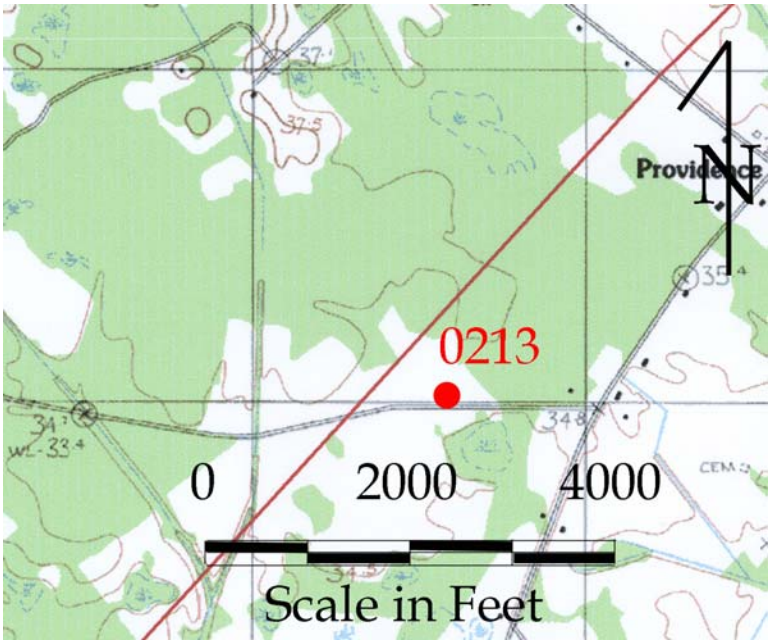


Figure 28. Felderville 7.5′ topographic map showing 0213.

was discussed in a previous section. The site, as previously mentioned, appears to be part of an eighteenth to nineteenth century fort or trading post (site form dating 1972). Inspection of the site form fails to specifically mention the cemetery, however an August 10, 1976 newspaper clipping mentions that unmarked graves from the tract were to be moved next to the existing cemetery. In addition, Keith Derting, the SCIAA site files manager, said that the cemetery was part of the original site (personal comm.unication February 17, 2006).

It is unknown whether the unmarked graves were ever relocated, however, the rest of the site area (with the exception of the marked cemetery) was destroyed in 1977 for the sewage plant.

No in-depth research has been performed on the cemetery, but its possible association with a trading post gives the cemetery potential for being eligible under Criterion B (associated with significant persons). The design and nature of the monuments, their arrangement, and the overall setting indicate that the cemetery also has the potential for eligibility under Criterion C (design). Finally, it is likely that investigation of the cemetery could contribute to population demographics, diet and foodways, and health. It is therefore recommended potentially eligible under Criterion D (information potential). The cemetery, however, is located about 0.2 mile from the proposed transmission corridor and cannot be seen from the project site through an area of dense pines and hardwoods. In addition, the cemetery has already been visually impacted by the wastewater plant, which surrounds the property.


Figure 29. View of 0213 showing a side addition.

Even if the cemetery were eligible for the National Register, it will not be affected by the current project.

Site 0213 (Figure 28) is a ca. 1900 house located at 1101 Ibis Point Road near the town of Providence. There is a bottom porch that is L-shaped on the front and right elevation of the house and a small second story porch that is centered on the middle third of the front façade (Figure 29). Two additions on the rear and right side of the house, along with storm windows and awnings, alter the house's original appearance.

Figure 30. View of 0213 from the proposed transmission corridor.

The house is recommended not eligible for the National Register due to its extensive alterations, however even if the structure were to be found eligible, it is well shielded from view of the proposed transmission corridor (Figure 30). In addition, several power lines are in existence around the house, which already provide visual obtrusion. The proposed corridor will run parallel to an existing power line and will not create any additional intrusion.

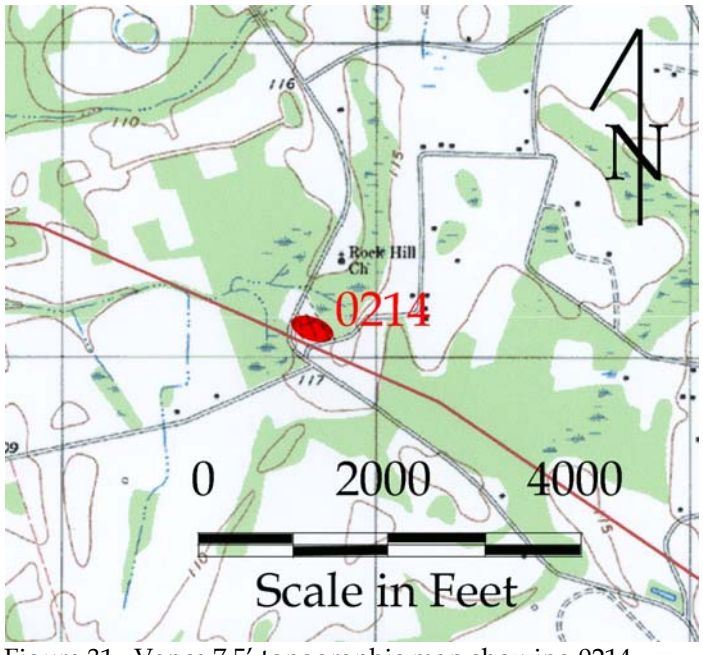


Figure 31. Vance 7.5′ topographic map showing 0214.

Site 0214 (Figure 31 and 32) is the African-American Rock Hill Church Cemetery located at the corner of Rock Hill Road and Chateau Lane in Vance, South Carolina. Several hundred graves are present with the earliest marked stone dated 1854. The cemetery is still in use today. Undulating topography was noted toward the rear of the cemetery, which suggest a large number of earlier unmarked graves. Several of the graves have birth dates of people born into slavery.

The Rock Hill Church Cemetery portrays many characteristics distinctive of African-American cemeteries, such as burial customs, folkways, and artistic traditions.

The cemetery displays burial customs typical of many African-American burial grounds – kin-based groupings.

While not neatly organized with coping or fences, related family members are loosely grouped in the same area.

Figure 32. View of group of whitewashed stones for the Williams family.

The artistic traditions of African-American cemeteries are prevalent in the Rock Hill Church Cemetery. Examples include concrete hand-made markers, vaults with the tops exposed, whitewashed stones, and stones painted blue. Very few impermanent markers were observed, but given the amount of unmarked graves toward the rear of the cemetery, it is likely that field stones or wood markers once existed. Plants, such as Yucca, are also observed toward the older area of the cemetery and represent "living memorials."

Grave goods are prevalent at the cemetery. Meaning of grave goods can vary from burial to burial, but several graves contained coins laid upon them. In addition, statuettes and other common items were found on some burials.

Figure 33. View of 0214 from the proposed transmission line.

While displaying many African-American characteristics, the cemetery does vary somewhat with other rural African-American cemeteries in that it is not wooded. One such cemetery, Scanlonville (see Trinkley 2001), was in use into the 1990s and still deemed eligible for the National Register. As was common for some of these cemeteries, the area remains wooded until the space is needed for burial. The one burial plot is then cleared. The Rock Hill Church Cemetery appears to be in constant care by the

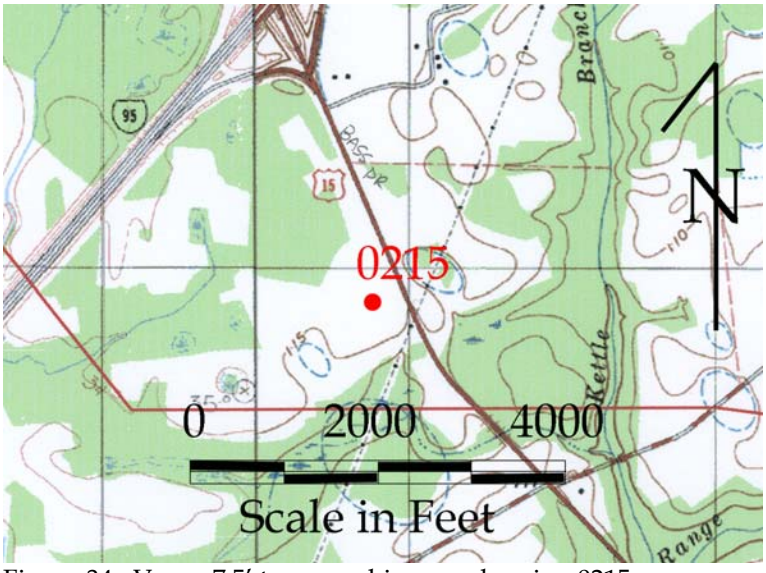


Figure 34. Vance 7.5′ topographic map showing 0215.

people of the church, which is located 0.1 mile north of the cemetery. The people of the church may also be a good source of oral history for the cemetery.

Site 0214, the Rock Hill Church Cemetery, is recommended eligible for the National Register under Criterion C – the embodiment of *distinctive characteristics of a type, period, or method*.

While not running directly through the cemetery, the proposed transmission corridor is about 100 feet from the cemetery, putting the transmission line right-of-way on the edge of the cemetery property (Figure 33). The cemetery has already been affected by a small transmission line and while there will be a slight increase in traffic when the line is erected, there is no reason for any of the work vehicles to park on the access road to the cemetery. Care must be taken by workers to avoid the cemetery with trucks and equipment. The cemetery should be marked on the plans with a strict instruction that the area is to be avoided by all workers and equipment.

Site 0215 (Figure 34) is the early 1800s Dantzler house. It is located on Bass Drive near the town of Providence. The family of Thomas Dantzler, who grew up in the house, states that the core of the house was built in the early 1800s (Personal Communication Fe-bruary 2006 and shown in Figure 35). The addition in the rear of the house, which is a kitchen, was built in 1906.

The house features a gable roof with tin roofing and two corbelled chimneys on the ends of the house. A modern porch has been added to the front, however, the date of the addition is


Figure 35. View of front façade of 0215.

Figure 36. View of 0215 from the proposed transmission corridor.

unknown.

Site 0215 has gone through minor alterations from its original form. Besides the additions of the rear kitchen and porch (part of the historic fabric given their age), storm windows, weatherboard, and shutters have altered the appearance of the house.

However, the house is partially hidden from the proposed transmission corridor, which would be erected about 0.19 mile away (Figure 36). While most of the space between the house and the proposed corridor is field, a thin smear of trees does obstruct the view to the rear of the house. In addition, the structure has been affected by an existing line, which brings electricity to the house.

Site 0215, the Dantzler house, is recommended eligible for the National Register; however it will not be affected by the proposed transmission line due to the distance between the two.

Site 0216 (Figure 37) is the Joiner Cemetery on Torrington Road in Eutawville. The earliest marked death date is 1853 on the stone of the infant WT White. Several burials are of people born into slavery; however, people are still being buried at the cemetery.

There are at least 50 marked burials (Figure 38), however, numerous depressions, including attempts to infill the depressions, are located throughout the cemetery (Figure 39).

Joiner Cemetery represents a small, rural African-American cemetery, however, many of the distinctions that typify a cemetery of this type such as the artistic traditions are absent. No grave goods were present and very few hand-made markers were found.

However, the cemetery does evidence burials of kin-based groupings, including one small fenced in area. Most of the markers are simple headstones, but at least one obelisk was

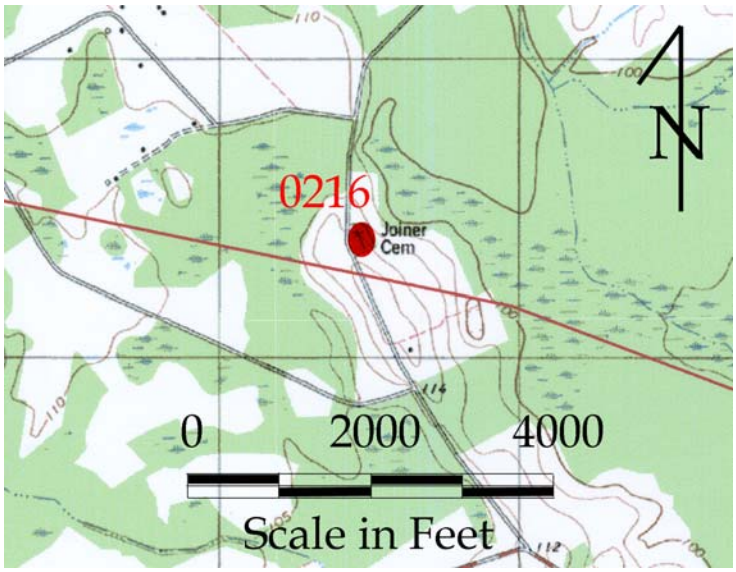


Figure 37. Sandridge 7.5′ topographic map showing 0216.

Figure 38. View of 0216 from Torrington Road.

noted and several vault tops marked burials. No whitewashing or other painting of stones was found.

This cemetery is also different from some 'typical' African-American cemeteries in that it is not wooded, as is sometimes the custom. Plots would only be cleared when someone would need to be buried. In fact, the modern topographic map, Sandridge 7.5' dated 1979, shows Joiner Cemetery as wooded. Sometime in the last 27 years, the area has been cleared, possibly for the convenience of modern burials.

Joiner Cemetery, 0216, is recommended not eligible for the National Register for its lack of cultural distinction. The cemetery, however, may be eligible under Criterion D (information potential).

The transmission corridor, however, is about 800 feet from Joiner Cemetery and would have very little visual impact. A thin smear of trees separating the cemetery from the adjacent field would also shield the property from view.

Figure 39. View of depressions, with some filled, at 0216.

CONCLUSIONS

This study involved the examination of a 40-mile corridor for the Cross to Orangeburg Transmission Line. The project area is located in Orangeburg County. This work, conducted for S&ME, examined archaeological sites and cultural resources found on the proposed project corridor and is intended to assist Santee Cooper in complying with their historic preservation responsibilities.

As a result of this investigation six sites, 38OR280-285, were uncovered. Site 38OR280 is a Middle Woodland scatter; site 38OR281 is an early to mid-twentieth century domestic scatter; site 38OR282 is a late nineteenth to early twentieth century domestic site; site 38OR283 is a Middle Woodland to Mississippian and eighteenth to early nineteenth century scatter; site 38OR284 is a late nineteenth to early twentieth century domestic scatter; and 38OR285 is a late nineteenth to early twentieth century domestic site. All sites are recommended not eligible for the National Register of Historic Places for lack of integrity and inability to address significant research questions.

A survey of historic sites was conducted within a 0.5 mile APE. Six resources, 0212-0216, were identified. Site 0212 is a ca. 1819 cemetery that is potentially eligible for the National Register; site 0213 is a ca. 1880 house that is recommended not eligible; site 0214 is the Rock Hill Church Cemetery that is recommended eligible for the National Register; site 0215 is a ca. 1800s house that is recommended eligible for the National Register; and 0216, the ca. 1853 Joiner Cemetery, is recommended not eligible for the National Register. However, the only resource that the proposed line might affect is 0214, the Rock Hill Church Cemetery. Care must be taken to avoid the cemetery during construction of the line.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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